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DOCUMENT 1

NATIONAL EVALUATION OF THE SCHEME OF OPERATION BLACKBOARD

IMPLEMENTATION OF OPERATION BLACKBOARD SCHEME IN PRIMARY SCHOOLS IN INDIA

- GROUND REALITIES IN 1999-2000

KULDIP KUMAR

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Ground Realities in 1999-2000

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PREFACE

This study was commissioned by the Ministry of Human Resource Development, Department of Education, Government of India (GoI) to have an objective feedback on the existing schooling facilities in primary schools in the country, especially after the implementation of the Scheme of 'Operation Blackboard' (OB), which was launched in 1987-88. The OB aimed at providing basic schooling facilities in every primary school, that is, a minimum of two teachers, two all-weather classrooms, a varandah, toilet facilities for boys and girls separately and a set of teaching learning materials and blackboards in all those primary schools which did not have these basic facilities in 1986. The GoI was keen to have the impact of the scheme evaluated.

In view of various other interventions as a follow-up of the National Policy on Education (NPE) 1986 and its Programme of Action (POA), and especially after launching the internationally funded projects for school improvement and development programmes in early nineties, it was consciously decided not to undertake "evaluation" of the impact of the OB scheme, but to understand the implementation aspect in terms of progress in reduction of single or no classroom or no building schools, schools with less than two teachers, availability of teaching-learning-materials provided under the scheme and their utilisation by teachers and related aspects.

Accordingly, a comprehensive study was designed to meet the requirements of the GoI. A nation-wide sample survey was carried out to understand the ground realities of OB implementation covering all 25 states (as in 1999-2000) and 3 union territories, visiting over 7,700 primary schools located in community development blocks in the country. Selected thematic studies were undertaken to gain insights in the processes followed to manage financial assistance provided by the GoI to the states, building construction component, and selection and procurement of teaching-learning-materials. Special investigations were carried out to see the utility of special teacher training programmes and the relevance of instructional kits provided to schools in the context of primary stage curriculum. Case studies were attempted to understand field dynamics between and within school functionaries and stakeholders in village community, related to education in general and primary school in the village in particular. A synthesis of 28 survey related studies on the implementation of OB Scheme in 25 States and three Union Territories as well as the highlights of selected theme based investigations have been documented and published as a series of documents. The present document forms a part of this series.

Findings of studies mentioned above were shared in a seminar held on 25-26 February 2002 which was attended by representatives of central and state government officials associated with the implementation of OB scheme, contributors of various studies undertaken and selected professionals active in education.

This report is the outcome of the efforts made by NIEPA in collaboration with various experts and institutions in the country to realise the above stated purpose of the study. But the sole credit for the execution of the multi-site study involving a wide range of partners goes to Professor Kuldip Kumar. Let me record my deep sense of appreciation and gratefulness to Professor Kumar for coordinating project implementation throughout the country and also for preparing the National Synthesis Report. In this work, he was ably assisted by Dr. Mona Sedwal, Project Associate Fellow, Mr. Hemant K. Panda, Project Assistant and Ms. Rajni Soni, Project Typist. I record my thanks to Director, NIEPA who took personal interest in the implementation of the Project and provided unflinching support at every stage of its execution. Being a national level study the total size of the Project was very large and involved huge administrative and financial operations at the Institute, which were carried out by NIEPA administration with a sense of commitment and efficiency. I acknowledge this full support and cooperation extended by the Registrar and other members of the Administrative Staff of NIEPA. Finally, let me also thank all the members of the Project Advisory Committee and other professionals who guided us from time to time in designing and implementing the Project.

R. Govinda
Project Director

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Executive Summary

1. The study examined issues related to planning and implementation of the Operation Blackboard (OB) Scheme in rural primary schools in the country. A representative sample of 7719 schools in 28 states and union territories was observed to understand the ground realities. Basic components of the scheme looked into included provision of (a) all- weather two classrooms with a covered verandah and separate toilets for boys and girls, (ii) two teachers, (iii) essential teaching-learning-materials (TLMs) and (iv) Special Orientation Programme for Primary Teachers (SOPT).

2. Specifically, the issues addressed were:

   (a) Processes of planning and implementation of the scheme
   (b) Status of basic facilities in primary schools in 1999-2000 which had been the target of the scheme in1987-88
   (c) Quality of physical infrastructure provided in primary schools under the scheme
   (d) Teacher training inputs
   (e) Availability of selected TLMs provided to schools
   (f) Management of financial inputs provided by the central government to respective state governments under the scheme
   (g) Situational analysis of field dynamics between and within school functionaries and the beneficiaries at the village level

3. Triangulated methodology was followed to understand the planning and implementation of the scheme that included:

   (a) National Sample Survey (NSS) of rural primary schools to find out the status of implementation of the scheme
   (b) Issue based thematic studies
   (c) Case studies

4. For the NSS study all primary schools in rural areas in the selected states and union territories, with reference date 30th September 1993, were taken as the population of schools. A multi-level random sampling procedure was followed to draw a representative sample of schools from each selected state and union territory. At the first level, districts were selected taking into account the total number of districts in a state or union territory. From bigger states with 45 or more districts as in 1993, six districts were selected by dividing the state geographically into six segments and drawing one district from each segment randomly. Four districts were taken from states with total number of districts between 44 and 18, two districts from states with total number of districts between 17 and 7, one district from states with number of districts less than 6. In the case of Jammu and Kashmir three districts were taken, one each from Jammu, Kashmir and Ladakh regions. At the second level, from each selected district all blocks were taken if the total number of blocks in the district was ten or less that ten. In case the number of blocks was more than ten, only ten were

selected randomly. At the third level, within a selected district, 100 schools were drawn from the selected blocks, proportionate to the total number of schools in the selected block. The only exception made was in the case of Arunachal Pradesh where the total number of schools in the selected block were around 100 only. In this case only 50 schools were selected from the selected district.

5. Out of the selected sample of 7900 schools, drawn from 80 districts in 28 states and union territories, data for the NSS study could be collected from 7719 schools only due to insurgency, floods, or other such unavoidable circumstances.

6. Schedules for the NSS study were developed in NIEPA in consultation with professionals in the field of educational surveys in English language. Translated versions in respective regional languages were prepared and translated back in English to check on the authenticity of the translated version. The schedules were administered by specially trained field investigators who belonged to the region where data were to be collected.

7. Respondents of the NSS study included head-teachers, teachers, senior students of primary schools, community representatives, officials of Department of Education at block, district and state level associated with the implementation of the scheme.

8. The NSS study data collection activities were carried out in 1999-2000 in collaboration with regional level institutions or professionals having experience in conducting educational surveys. To ensure that field investigators visited the sampled schools, four photographs of the visited school were insisted, showing front view of the school building with school's name, interior of room or place where class one was seated, class four/five was seated and one community representative interviewed.

9. The physical infrastructure study was conducted by the Central Building Research Institute (CBRI), Roorkee in five states representing varied geo-climatic zones in the country in 520 primary schools out of the 7719 schools surveyed in the NSS study, randomly drawn from the population of schools wherein construction component was provided.

10. Financial management under the scheme was investigated by the Centre for Management and Development Research, Dharwar, in seven states selected on the basis of development and utilisation level of funds received under the scheme.

11. Other thematic studies on policy related issues, teacher training inputs and the kits supplied as a part of TLMs were conducted by experienced professionals utilising mainly secondary data and interactions with concerned state officials.

12. Case studies of village level behavioural dynamics within and between school and community were conducted by scholars who were initiated in the ethnographic approach to study such issues.

13. Findings of above mentioned investigations point out that:

- The OB scheme 1987-88 as well as the modified version 1993-94, has covered about 3/4th of the primary schools in rural areas.
- The 3/4th coverage is rather uneven, with wide variations within states, districts as well as blocks.
- The state averages show that the minimum facilities visualised in the scheme in terms of provision of rooms, teachers, TLMs etc. have been provided. In operational terms, however, at the national level, zero or single classroom schools continue to exist in 26 out of 28 states/union territories.
- In the 3/4th schools covered under the scheme, the facility for separate toilet for girls is available in 14.6% of schools. Common toilets are available in 23.1% of schools
- Availability of different items of the TLMs package varies markedly between and within different states.
- The contingency fund available with school authorities for repair or replacement of worn out TLMs items has been perceived to be either not available or inadequate.
- Utilisation of the TLMs items, available in the school, is almost negligible. 2/3rd of teachers were not aware of the correct expansion of the OB abbreviation. Only 6.2% teachers could identify the basic components of the scheme.
- Analysis of SOPT programme brought to light the theoretical nature of training of varying duration, ranging from 3 to 7 days, without any hands-on experience with the TLMs items.
- The cascade model of SOPT training, with trainers mostly lacking exposure to primary schooling contributed to non utilization of available TLMs
- Non-utilization of Science, Mathematics and Tools kits was attributed by teachers to their little relevance to primary stage curriculum.
- Analysis of formulation of a uniform OB scheme throughout the country with wide variations in school enrolment in primary classes, reflect lack of awareness about the ground realities.
- Transfers of teachers under pressure to schools of their choice have created about 14% schools with no or one teacher only.
- Lack of financial monitoring has resulted in unspent funds to the tune of 60 to 90% out of the funds released for the TLMs in 7 out of 28 states.
- Absence of proper maintenance of physical infrastructure of school created out of the scheme has rendered the physical infrastructure almost unfit for schooling purpose.
- Reverence for primary teachers in the village community is declining.

14. Findings suggest that:

- Different components of the OB scheme have been provided in schools under various other programmes launched in the nineties and such duplications may be avoided.

- The OB scheme may be suitably integrated with other ongoing school improvement programmes.
- Community involvement in the management and supervision of schooling activities needs serious consideration and follow-up action.
- Relevance of curriculum to learners' environment and cultural ethos and its transaction in the "home language" of learners in at least the first two years of primary schooling may contribute towards quality improvement in primary education.
- Implantation and mass applications of half-baked pedagogical practices in primary schools needs to be disciplined.
- The educational process at primary stage should include optimal nurturing of learners' potentialities and over-emphasis on scholastic learning achievements should be suitably moderated.

15. The following observations deserve special mention:

- About one-fourth of rural primary schools in the country, with 1993 as the base, have not been covered under the OB scheme.
- Implementation of different components of the scheme by different state departments, at different points of time, lacking systematic co-ordination within and between departments, has contributed to diffused and sporadic expected outcomes which vary considerably from state to state, and within a state from region to region, making the otherwise possible achievements almost invisible.
- A standardized one-time provision of OB package for all the primary schools in the country is another major factor for its very limited contribution to improve essential schooling facilities in real terms
- Over emphasis on covering larger numbers of primary schools under the scheme diluted the quality of inputs provided for school improvement
- Absence of regular, planned and concurrent monitoring of implementation of the scheme by the central and the state governments caused serious distortions in the application of laid down norms and procedures.
- Indiscriminate provision of additional classrooms and teachers under pressure from local groups has caused continuance of single-teacher and single-classroom schools in the country to the tune of almost ten to thirteen per cent.
- Lack of genuine involvement of local community in seeking support to provide necessary funds for maintaining and owning the school plant has promoted indifference of the community towards school improvement.
- Irregular school inspections and indifference of the local community have promoted lack of seriousness on the part of teachers towards their expected duties and responsibilities.
- Teaching practices of teachers have contributed to rote learning.
- The time spent on teaching tasks by teachers who prefer to commute long distances to attend school has declined.

- Absence of relevance of the school curriculum to local socio-economic-geoclimatic conditions has deprived the local communities from the possible benefits of primary education in their development.
- Duplication of OB related inputs under a variety of internationally funded programmes or internally floated "new programmes" by modifying existing schemes and change in the priorities of concerned authorities from time to time to suit the expectations of frequently changing higher authorities and local pressures, have made most of the school functionaries and beneficiaries oblivious of the OB scheme inputs and their intended objectives.
- Over emphasis on in-service teacher training in a wide variety of pedagogical concepts and practices, successfully applied in other countries with relatively smaller groups of students and technology based support services, without adequately experienced trainers who have first hand exposure to prevailing ground realities in rural primary schools in India, has promoted indifference in primary school teachers towards the new training curriculum.
- Growing suspiciousness of professional groups towards education related agendas of different political groups have resulted in ambivalent perceptions of teachers regarding the new initiates being taken in different parts of the country under the patronage of different educational advisors.
- OB scheme related achievements, in terms of statistical averages, of availability of teachers, classrooms, teaching learning materials and teacher training inputs, hide much more than what they reveal. All-India averages of availability of 3.3 classrooms per school in 1999 (compared to 2.3 in 1993), 85.6% schools with two or more number of teachers in 1999 (compared to 59.5% in 1986) and reported provision of basic TLMs in practically every school once upon a time, indeed remarkable in terms of figures, do not reflect the prevailing state of affairs in the primary schools. A single teacher continue to take care of more than 100 students under the shade of a tree in summer or under the sky on a sunny winter day, or at best in the covered verandah as the inside of constructed or earlier available physical infrastructure is not usable.
- The findings reported in about five dozen investigations probing into the outcomes of the OB scheme, reflected in this report, if taken seriously, have the potential to carry out the much needed remedial measures to correct the distortions in the formulation and implementation of the scheme.

Chapter 1 Context

The skills of reading, writing, calculation, and problem solving developed directly or indirectly by basic education are fundamental to national development in terms of productivity in all forms and at all levels of work force. These competencies are learned within a curriculum that builds the base of knowledge needed for effective participation in society. Common sense as well as research support the idea that the quality of a nation's work force is important to economic growth and social development.

The Indian Constitution has made a provision, in the form of a Directive Principle, to make education free and compulsory for all children until they complete the age of 14 years. Since 1950 determined efforts have been made towards the achievement of this goal. During the last five decades there has been a remarkable increase in the number and spread of institutions as well as enrollment. Almost universal provision of institutions has been achieved at the primary stage. However, Universalisation of Elementary Education (UEE) in its totality is still an illusive goal and much needs to be done. Nearly one- third of school going age children continue to be out of school. Retention of children in schools is low and wastage considerable.

The present study has a focus on the contribution of Operation Blackboard (OB) scheme in the school improvement programme at primary stage.

Chapter 2

Introduction

Genesis of OB Scheme

The Operation Blackboard (OB) Scheme was launched in 1987 in pursuance of the National Policy on Education-Programme of Action (NPE-POA) 1986, to provide minimum essential facilities to all primary schools in the country. The NPE 1986 had recognized that unattractive school environment, unsatisfactory condition of school buildings and insufficiency of instructional material function as demotivating factors for children and their parents. The Policy, therefore, called for a drive for substantial improvement of primary schools and provision of support services. To this end, the scheme of OB was conceived. The minimum facilities under the scheme included provision of (i) two all weather rooms (floor area of each room approximately 30 sq. mts.) with covered varandah (about 2.4 mts. in depth), (ii) separate toilets for boys and girls, (iii) two teachers, one of them preferably a woman, and (iv) teaching-learning materials. It was planned to provide these facilities in three phases; phase 1 to cover 20% of blocks in the country in 1987-88, phase 2 to cover 30% of blocks in 1988-89, and phase 3 to cover the remaining 50% of blocks in 1989-90. Details of OB scheme are given Appendix 1.

As stated in the Programme of Action of National Policy on Education (POA-NPE) 1986, "the launching of this scheme had greater significance in that it was a manifestation of the Union's intent to shoulder its share of responsibilities in this vital area of national life, a responsibility arising from Education being in the Concurrent List". Implicitly, perhaps, it was envisioned that provision of 'minimum essential facilities' in primary schools may lead to an increase in students' enrollment and their retention in school.

Situation As in 1986

According to the Fifth All India Education Survey, 1986, the gross enrollment of 6-11 age group was 85 per cent and that of 11-14 age group 48.9 per cent in 1985-86, compared to 43.1 per cent and 12.9 per cent for the respective age groups in 1950-51, when provision of free and compulsory education to all children until they complete the age of 14 years was made as a Directive Principle of the Indian Constitution.

The drop-out rates were 47.6 per cent in classes I-V and 64.4 per cent in classes I-VIII, and participation of girls in primary education was 40.2 per cent and in upper primary education 35.1 per cent in 1985-86, which was below the normative percentage of about 50 per cent.

Developments since the NPE, 1986, and its POA

The NPE, 1986, and its POA had given unqualified priority to Universalisation of Elementary Education (UEE) and introduced many innovative strategies to achieve this goal. The OB scheme was one of the five major strategies planned to achieve the UEE. Other four strategies included (i) shift in emphasis from enrollment drives by participative planning in which the teachers and the villagers could formulate family-wise and child-wise design of action to ensure that every child regularly attended school or non-formal education centre and completed at least five years of schooling or its non-formal equivalent, (iii) adoption of child-centered and activity-based process of learning at the primary stage, and (iv) access to education of millions of girls and working children who, because of socio-economic compulsions, cannot participate in school systems.

As a result of the above mentioned initiatives taken by the central and state governments to achieve hundred percent enrollment and retention at primary and upper primary stages, and the OB Scheme was just one of them, noticeable changes were observed in Gross Enrollment Ratios (GER) during the period 1986-87 and 1990-91. Total enrollment in classes I-V increased from 95.96 per cent to 101.03 per cent and that of girls from 79.21 per cent to 85.97 per cent.

EFA Declaration and Follow-up Action

The World Conference on Education for All (EFA) held in 1990 in Jomtien, Thailand, adopted a Declaration calling upon all member states (India being one of them) and international agencies to take effective steps for achieving EFA by the year 2000. The ultimate goal affirmed by the Jomtien Declaration on EFA is to meet the basic learning needs of all children, youth and adults. Specifically, these learning needs comprised :

Essential learning tools such as literacy, oral expression, numeracy and problem solving, and the basic learning content such as knowledge, skills, values and attitudes.

Towards fulfillment of these learning needs, the Declaration of EFA took a broadened view of basic education as consisting of formal schooling, non-formal education programmes as well as open learning systems which together attempt to reach basic education to all children as well as adults. India was a signatory to the Jomtien Declaration and initiated action towards the EFA commitments forthwith. The Central Advisory Board of Education (CABE) which is the highest education policy making body in India, recognized the Jomtien Declaration on EFA as a reaffirmation of the policy orientation given to elementary education in the National Policy on Education in 1986 from the national point of view and endorsed the Declaration. The CABE called for further strengthening of the processes initiated through the NPE-1986, highlighted the need for increased financial inputs to achieve the goals of EFA and formulated a broad operational framework for receiving financial assistance from international agencies for undertaking large scale projects to achieve the EFA targets. The CABE also emphasized that the additional resources generated through external assistance should be utilized for educational reconstruction which should go beyond the conventional measures such as opening new schools, construction of school buildings and appointing teachers.

The goals, targets and strategies enunciated in the NPE 1986 and updated in 1992, and endorsed by the CABE, have then been incorporated into successive Five-Year Plans. The goals were pursued during the Eighth Five Year Plan which also involved the launching of major projects supported by external funding and the literacy campaigns under the auspices of the National Literacy Mission. They are further being followed up during the current Ninth Five-Year Plan, in operation from 1997 to 2002.

A limited mid-term assessment of implementation of OB Scheme was undertaken in 1992 and the scheme was revised to include mid-course corrections and to extend the scheme to upper primary schools.

The revised scheme had the following three sub-schemes :

- Continuation of ongoing Operation Blackboard to cover all the remaining primary schools, especially those in SC/ST areas.
- Expanding the scope of Operation Blackboard to provide three teachers and three rooms to primary schools wherever enrollment warrants them, that is, exceeds 100.
- Extending Operation Blackboard to upper primary schools to provide :
    1. At least one room for each class/section.
    2. Headmaster-cum-office room.
    3. Separate toilet facilities for boys and girls.
    4. Essential teaching-learning-equipment including a library.
    5. At least one teacher for each class/section.
    6. A contingency grant for replenishment of consumable items and minor repairs.

Limitations of Examining the Impact of OB Inputs

The brief overview of various additional inputs provided (as reflected in previous paragraphs) since the launching of the OB Scheme in 1987-88, should convince the reader that the achievements in the field of primary education in the country in terms of enrollment, retention or other quality related aspects at primary stage are the results of a cumulative effect of all the inputs, including the OB Scheme, and partialling out of effect of OB Scheme inputs and their impact, under the prevailing educational scenario in the country, could not be the aim of the present study. The OB Evaluation Study is, therefore, limited *to understanding the ground realities related to implementation of OB Scheme 1987 and its revised version in 1992, at primary stage in rural areas representing all community development (CD) blocks, in terms of availability of essential infrastructural and human resource facilities as* *envisioned in the scheme in primary schools in the country.* Upper primary stage was excluded as very limited funds were released by the central government for implementing OB Scheme at this stage.

Multi-Dimensional Approach

For a comprehensive understanding of implementation of OB scheme, a national sample survey of primary schools was undertaken to find out the extent to which the OB scheme inputs have reached Primary Schools in different parts of the country. In addition, thematic studies were carried out to gain insights about the status of implementation of specific components of the scheme and approaches followed in their implementation. Case studies, at village level, were also conducted to study behavioral dynamics between and within school and community in relation to education.

Coverage of OB Study

As stated above, in addition to a national level sample survey of primary schools, specific sub-component wise issues related to the scheme were also examined as thematic studies. These studies included :

- An Analytical Study of the General and Specific Objectives of the scheme of 'Operation Blackboard' as defined in 1987 and their Reflection in the Process of Planning and Implementation of the Scheme.
- An Evaluation Study of Management of Finances and Supply of Provisions in the OB Scheme.
- A Study of Building Component of OB Scheme
- An Analytical Study of Teacher Training under the Scheme of Operation Blackboard.
- A Study of Science and Mathematics Kits supplied under OB Scheme.
- Case Studies of Field Realities in Village Primary Schools.

Chapter 3 Issues Addressed

The issues examined in the study are related to:

- Processes of planning and implementation of the OB Scheme
- Status of basic facilities available in primary schools in 1999-2000 which had been the target of the scheme since 1987-88.
- Quality of physical infrastructure and human resource inputs provided in primary schools under the scheme
- Nature of teacher training inputs to enable teachers to utilize the teaching-learning-materials (TLMs) made available to schools.
- Analysis of potential of selected TLMs provided to schools for expected qualitative changes in teaching.
- Management of financial inputs provided by the central government to respective state governments under the scheme.
- Situational analysis of field dynamics between and within school functionaries and the beneficiaries at village level.

Specific issues considered under each of the above mentioned aspects of OB Scheme are stated under respective heads in the following paras, with a brief on the methodology followed to understand each issue. Details on methodology adopted in the study are presented in the chapter on Methodology.

National Sample Survey(NSS) Study on Implementation of OB Scheme

Specifically, the survey was designed to provide information on the following issues in respect of rural primary schools covered under the OB Scheme, selected randomly, following a multi-stage sampling procedure :

* Statewise availability of number of classrooms in Primary Schools in 1999-2000 and their comparison with classrooms available in 1993 and 1986

* Statewise availability of average, minimum and maximum number of classrooms in Primary Schools in 1999-2000.

* Statewise availability of average, minimum and maximum number of teachers in Primary Schools in 1999-2000.

* Statewise availability of toilet facilities in Primary Schools for boys and girls separately in 1999-2000.

* Statewise availability of drinking water facility in Primary Schools in 1999-2000.

* Statewise availability of blackboards in Primary Schools in 1999-2000.

* Statewise availability of essential Teaching Learning Materials (TLMs) in Primary School in 1999-2000.

* Statewise availability of teachers in Primary Schools who attended Special Orientation of Primary Teachers (SOPT) programme.

* Statewise student enrollment in Primary Schools in 1986, 1993 and 1999-2000.

* Statewise students attendance in Primary Schools in 1999-2000.

* Statewise nature of supervision conducted in Primary Schools by concerned state authorities.

* Statewise availability of contingency money provided by concerned authorities to Primary Schools.

* Statewise nature of community participation in the functioning of primary schools, related to OB scheme implementation.

For collection of required information especially designed schedules were canvassed by trained field staff through interview mode. Respondents included head and other primary school teachers, students, community members, officials in charge of OB scheme at block, district and state levels. The survey covered a total of 7719 primary schools in rural India, drawn from 28 states and union territories. 80 districts were selected following cluster level simple random sampling procedure; the number of clusters or segments in each state were determined by the size of the state. A set of districts in a state formed a cluster or segment. Details of school selection procedure are given in chapter on Methodology.

State and regional level institutions or professionals were involved in data collection related tasks. Analysis of data was carried out centrally by NIEPA. Data collection activities were carried out in 1999-2000.

Further details of NSS Study are presented in chapter on Sample Survey of Primary Schools. District-wise details of prevailing realities are provided in respective state reports.

An Analytical Study of the General and Specific Objectives of the Scheme of 'Operation Blackboard' as defined in 1987 and their Reflection in the Process of Planning and Implementation of the Scheme

This study examined OB scheme formulation and implementation related issues. Available documents in the MHRD, discussions with state authorities, interactions with school functionaries and community representatives, and analysis of state level survey study reports and reports of other thematic studies undertaken as a part of comprehensive analysis of implementation of OB scheme provided the basic data for the study.

Further details of the study are reported in chapter on Policy Related Issues of OB Scheme separately.

An Evaluation Study of Management of Finances and Supply of Provisions in the OB Scheme

Issues related to management of financial resources provided by the central government to state governments for implementation of various components of OB Scheme were taken up in this study. 260 primary schools, located in 26 blocks of 13 districts in 7 states, drawn out of the 28 states and union territories covered in the NSS Study and available records in the concerned central and state departments, were the major sources of data utilized in this study. Further details are reported in chapter on Financial Management separately.

A Study of School Building Component of OB Scheme

Issues addressed in this study included (a) building spaces and efficiency, (b) structural and constructional aspects, (c) functional performance, (d) general acceptance, (e) students acceptance and teachers opinion, and (f) observations of the study team. 520 primary schools located in 5 states, representing different geo-climatic zones in the country, randomly drawn from the master sample of schools covered in the NSS Study and covered under OB Scheme, were visited by professionally trained investigators to collect relevant information for the study. Further details are presented in chapter on Building Component.

An Analytical Study of Teacher Training under the Scheme of Operation Blackboard

The study is a critique, based on secondary data. Available studies on Special Orientation of Primary School Teachers (SOPT) Programme were analysed to find out whether (a) SOPT has achieved better utilization of teaching learning materials (TLMs) supplied under OB Scheme, (b) the TLMs were appropriate to the content and process of primary education, (c) the training design and academic content under SOPT was in tune with the needs of classroom transaction in the context of the realities of Indian primary schools, (d) the "Trainers" identified under SOPT Programme had themselves the desired grounding in primary education, and (e) any rigidities in the training design which could have been impediments in producing the desired results.

Further details of the study are reported in chapter on Teacher Training Inputs.

A Study of Science and Mathematics Kits Supplied under OB Scheme

This study examined the relevance and use of different items of these kits in primary schools in Uttar Pradesh. Further details are given in chapter on Relevance of Instructional Kits.

Case Studies of Field Realities in Village Primary Schools

Interactions between village primary school functionaries and community representatives were observed to understand behavioural dynamics between and within school and community in relation to education. Case Studies were conducted in 18 different locations in the country, representing 12 states. Studies were conducted by investigators who were trained in ethnographic approach to study human interactions. Further details are reported in chapter on Situational Case Studies.

Chapter 4 **Methodology**

Keeping in view the nature of information required for meaningful understanding of various issues related to implementation of OB scheme, suitable strategies were decided for reliable data collection from respective sources. Processing of collected observations was carried out following quantitative as well as qualitative techniques. Issue-based methodological approaches applied in respective studies are presented in this chapter.

National Sample Survey Study

Sampling Design :

All primary schools located in CD blocks in the respective state or union territory, managed by the state government, or local bodies, or panchayati raj institutions, or privately managed and receiving financial assistance from the state and providing schooling upto class 4 or 5 (depending on the educational structure in state) were treated as population of schools for sampling purpose for national level sample survey study. Within a state or union territory, revenue district was the first level of sampling unit. Selection of number of districts in a state was decided in relation to total number of districts in that state. From larger states like Bihar, Madhya Pradesh and Uttar Pradesh which had more than 44 districts, 6 districts were selected following the cluster based simple random sampling procedure. The state map was divided into six segments and one district was selected randomly from each of six segments. Following this procedure, 4 districts were selected from states with total number of districts between 18 and 44, 2 districts were selected from states with total number of districts between 7 and 17, and one district was selected from states or union territories with total number of districts between 1 and 6. In the case of Jammu and Kashmir state, one district was selected from each of three provinces in the state, namely Jammu, Kashmir and Ladakh. Table 1 gives statewise number of districts sampled for the survey study. Maps showing the location of each sampled district within a state are given after the table.

At the district level, which was the second level of sampling, all CD blocks were selected if their total number in a district did not exceed 10. In case the total number of blocks exceeded 10, only 10 blocks were selected following simple random sampling procedure.

At the block level, which was the third level of sampling, primary schools were selected proportionate to the total number of primary schools in the selected block, to add upto 100 in a selected district. In Arunachal Pradesh, however, only 50 schools were selected in the selected district as total number of schools in a district was about 100 only.

In all, 80 districts were selected from 28 states and union territories, 100 schools from each district (except in Arunachal Pradesh where 50 schools were taken in each district), adding upto 7.900 schools which formed the sample for the survey study. In each selected district 5 to 10 extra schools were also selected to serve as replacement schools in case some of the originally sampled schools were not approachable due to unforeseen circumstances.

Computerized state, district, block and school level data base, created by the National Council of Educational Research Training (NCERT) for the 6th All India Educational Survey, was utilized for sampling purpose and to get postal address of selected primary school in a selected block and district in states other than Andhra Pradesh, Arunachal Pradesh, Himachal Pradesh and Andaman and Nicobar Islands. In these states selection of schools within a selected block was based on list of schools provided by the Education Directorate as the required information was not computerized at the NCERT level.

Table 1

Statewise Sampled Districts for National Sample Survey Study

S. NO.	No. of Distt. in 1993	No. of Sampled Distt.	STATE	DISTRICTS					
				1	2	3	4	5	6
1.	2	1	A & N Islands	CD Blocks					
2.	23	4	Andhra Pradesh	Karim Nagar	Vishakha Patnam	Nalgonda	Cuddapah		
3.	12	2	Arunachal Pradesh	Lohit	Lower Subansiri				
4.	23	4	Assam	Barpeta	Dibrugarh	Karbianglong	Cachar		
5.	50	6	Bihar	Rohtas	Paschim Champaran	Muzaffarpur	Saharsa	Bhagalpur	Ranchi
6.	1	1	Delhi	Outer Delhi					
7.	2	1	Goa	South Goa					
8.	19	4	Gujarat	Kachchh	Rajkot	Surat	Panchmahals		
9.	16	2	Haryana	Bhiwani	Yamuna Nagar				
10.	12	2	Himahcal Pradesh	Shimla	Chamba				
11.	14	3	Jammu & Kashmir	Leh	Punch	Udhampur			
12.	20	4	Karnataka	Belgaum	Dakshin Kannada	Gulbarga	Tumkkur		
13.	14	2	Kerala	Wayanad	Kottayam				
14.	45	6	Madhya Pradesh	Gwalior	Damoh	Indore	Vidisha	Bilaspur	Bastar
15.	30	4	Maharashtra	Ahmed Nagar	Akola	Chandrapur	Satara		
16.	8	2	Manipur	Imphal	Churachandpur				
17.	7	2	Meghalaya	East Garo	Jaintia Hills				
18.	3	1	Mizoram	Lunglei					
19.	7	2	Nagaland	Mon	Kohima				
20.	30	4	Orissa	Koraput	Khurdha	Sambalpur	Mayurbhanj		
21.	4	1	Pondicherry	CD Blocks					
22.	14	2	Punjab	Gurdaspur	Faridkot				
23.	30	4	Rajasthan	Jaisalmer	Udaipur	Nagaur	Ganganagar		
24.	4	1	Sikkim	South Sikkim					
25.	23	4	Tamil Nadu	Chengalpattu MGR	Coimbatore	Tiruchirapalli	Tirunelveli Kattabomman		
26.	3	1	Tripura	West Tripura					
27.	63	6	Uttar Pradesh	Tehri Garhwal	Nainital	Shahjahanpur	Hamirpur	Faizabad	Varanasi
28.	18	4	West Bengal	Jalpaiguri	Maldah	Medinipur	Burdwan		

Schedules for Data Collection

Schedules especially prepared to meet the intended purpose to provide meaningful information on issues related to availability of basic facilities in Primary Schools, were canvassed by trained field investigators. Five schedules were drafted in consultation with experts in the field of measurement and evaluation in general and educational surveys in particular. The schedules were tried out and necessary modifications were incorporated. Initially, schedules were prepared in English. Translated versions in the state language of respective state were prepared and translated back in English to ensure comparability of English version of schedules with translated version. Guidelines for field staff were also prepared to keep canvassing procedures in the field by different field investigators comparable, as far as possible.

Field staff engaged in data collection was provided required training in canvassing procedures to be followed. Field level supervision of investigators' performance was ensured. In addition, photographic evidence of investigator's having visited the assigned sampled schools was also collected in the form of four photographs; depicting the front view of school building with School Name Board, inside view of classroom or place where class 1 was held, inside view of classroom or place where class 4 or 5 was held, and at least one community representative who was interviewed by the investigator.

To maintain uniformity in computerized data-entry and data-analysis, individuals involved in these tasks in different states were given special orientation and hands-on training. Required software's were prepared and provided to each state agency, institution or individual. A format was also provided for presentation of state level findings, giving district level details on respective parameters.

On completion of data-entry in the respective state, the data-entered floppies were collected and processed centrally by the NIEPA Project team to develop Country Report, giving state level details of ground realities related to provision of OB inputs in schools. Simultaneously, state level agencies, institutions and individuals worked on the data analysis using the software provided by NIEPA for preparing the respective state Report with district level analysis, following the guidelines and reporting format provided for the purpose.

On-line telephonic service was provided through out the course of study by NIEPA to institutions or individuals who were associated with the NSS Study and other studies, to sort out problems faced during data collection, analysis work or report writing.

Financial Management Study

Taking into account the prevailing unevenness across the states with regard to the release and utilization of funds as well as overall development of the states and their geographical location, 7 states were taken up for the study. The selected states along with amount released by the central government for OB Scheme and level of utilization, and geographical location are given in Table 2.

Table 2

Selected States for Financial Management Study

State	Amount Released	Level of Utilization	Geographical Location
Rajasthan	More than Rs. 100 Crore	95-100%	North-Western region
Karnataka	More than Rs. 100 Crore	80-95%	Southern region
Punjab	Rs. 10 to 100 Crore	95-100%	Northern region
West Bengal	Rs. 10 to 100 Crore	80-95%	Eastern region
Tamil Nadu	Rs. 10 to 100 Crore	Below 80%	Southern region
Madhya Pradesh	Rs. 10 to 100 Crore	Below 80%	Central region
Goa	Less than Rs. 10 Crore	95-100%	Mid South-Western region

A total of 260 primary schools were visited for on-the-spot assessment for Financial Management Study. These schools were drawn from the sample of schools utilized for the National Sample Survey (NSS) Study, taking 20 schools from two districts in each of 7 selected states. Selected districts were drawn from the same set of districts which were included in the NSS Study in respective states.

Specially designed schedules were utilized to collect required information. Details are presented in the chapter on Financial Management of OB Funds. A separate report is also available.

Building Construction Study

The geo-climatic zones in the country were taken into account to select the states for this study. Five states representing different zones were sampled for examining building component of OB Scheme which included Andhra Pradesh, Haryana, Madhya Pradesh, Uttar Pradesh and West Bengal. Districts and blocks selected within these states represented plains, hilly terrains, areas experiencing heavy to no snow fall, and heavy to light rain fall, coastal climate and different seismic zones. The selected districts and blocks were drawn from the master sample as used in the NSS Study. Within a block schools covered under OB Scheme were examined. Statewise number of districts, blocks and schools selected for examining the construction aspect are given in Table 3.

Table 3

Selected States, Number of Districts, Blocks and OB Schools Considered for Building Component Study

State	No. of Districts	Blocks	No. of Schools
Andhra Pradesh	4	19	105
Haryana	2	13	83
Madhya Pradesh	5	14	122
Uttar Pradesh	4	28	118
West Bengal	3	17	93
Total	**18**	**91**	**521**

On-the-spot assessment of schools constructed under OB was made by a team of Structural Engineers of Central Building Research Institute (CBRI), Roorkee which collaborated with NIEPA in carrying out this aspect of the study. Further details are given in chapter on School Building Construction.

Case Studies

For case studies on interactions within and between school functionaries and beneficiaries or stakeholders in village community on education related issues, 18 locations were selected. Selection of location was done by the scholars who conducted these studies, keeping in view their convenience to stay in the selected location for about a month to observe field realities in village schools and community concerns related to education in general and village primary school in particular. Scholars who conducted these case studies using ethnographic approach, included research scholars, faculty members of universities and social activists involved in primary education.

To focus case studies on common parameters, scholars were sensitized in a training workshop of five days on methodological aspects to be kept in view and the reporting format to be followed in presenting the findings.

Further details are provided in chapter on Case Studies. Separate reports on each case study are also available.

Other Studies

Other theme based studies utilized secondary data, interactions with state officials and discussions with fellow professionals. Details are provided in respective chapters.

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Chapter 5

Macro-Analysis of OB Implementation

As mentioned briefly under Issues Addressed chapter, the National Sample Survey (NSS) study, which formed the basis of Macro-Analysis of OB Implementation, was conducted to observe ground realities related to OB inputs available at school level, their relevance and utilisation in the states.

Macro Analysis of OB Implementation

Introduction

The OB is one of the many initiatives taken by the Government of India (GoI) to equip every primary school, especially schools located in remote areas and serving marginalized groups, with certain basic infrastructure and human resources. As a large majority of schools lacking in basic facilities are located in rural area (almost 90 per cent), it was decided to include primary schools in rural areas, as defined in the OB scheme, as the population of schools for the study to analyse the extent of implementation of the scheme.

In view of the reality that many other strategies have also been applied to meet the goal of universal elementary education in the country, including universal access, universal retention, and improvement in quality during the same time span, that is, late eighties and nineties, as a follow up of the National Policy on Education (NPE), 1986 and updated in 1992, as well as the World Declaration on Education For All (EFA) made in the World Conference on Education for All held in 1990 in Jomtien, Thailand, and endorsed by the Central Advisory Board of Education (CABE), the highest education policy making body in the country, it was consciously decided not to attempt to analyse the impact of OB separately, and to treat the OB inputs along with inputs provided under other programmes holistically.

The comparisons made between OB and non-OB schools in the study are based on the information provided by the head teacher. However, it may be pointed out that the OB was launched in 1987-88, and many of the head teachers and other teachers had been transferred from one school to another during the period of implementation of the OB. Many of them were, therefore, not sure whether the OB related inputs were received in the school under OB or other programmes. In such cases it was decided to classify a school as OB school if the inputs under the OB, especially the TLMs were available in the school. It may also be stated that Proposals were formulated by the respective states to receive financial assistance from the GoI as per the guidelines of the OB scheme, but at the implementation stage the OB guidelines could not be followed due to many considerations and compulsions. This information was shared by concerned state officials with field staff on condition that their identity would not be disclosed. This was also substantiated by the observations of field staff at the time of data collection. Basic items of TLMs were not available uniformly in schools; some schools had certain items and some other schools had certain other items. All such factors made it rather difficult to examine the OB impact separately. The impact aspect was, therefore, viewed as combined effect of various programmes in operation on aspects like enrolment, retention or availability of TLMs. Learning achievement was not in .the focus of the study. However, teachers views were taken in this context. Available reports related to achievement surveys using same or different achievement tests and conducted in 1994 and 1997 were also taken into account.

In the macro analysis of implementation of the OB, observations and findings of other studies mentioned above (in chapter on Context) were also considered. Samples of schools for studies on building component and financial management were drawn from the same group of schools in selected states which were covered in the Sample Survey Study which formed the basis of macro analysis study.

Some of the schools selected as sample schools could not be included in the study in different sectors due to variety of reasons including insurgency, closure of school, existence of school in records only, natural calamity and the like. Findings of the study are therefore, based on the data collected from the schools which could be visited with all possible means available to field investigators. 7719 schools were visited out of the sampled 7950 schools, which is 97.09 per cent of the selected sample of schools.

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General Objective

The macro level analysis examined the status of implementation of OB scheme mainly at the school level in all states and selected union territories in the country. The study followed the sample survey technique and it was limited to rural areas only as almost ninety percent of primary schools in the country are in rural areas, and practically all of these did not have minimum facilities in 1986 (Fifth All India Educational Survey, NCERT), and OB scheme was aimed at improving infrastructural and educational inputs considered necessary for organizing meaningful teaching-learning in such schools.

The micro level analysis of rural primary schools, to understand the functioning of village primary schools and interactions between school and community as well as within school, was undertaken on a limited scale as case studies, based on ethnographic technique. The case studies are reported separately.

Methodology

Sample Selection

For selecting a scientifically representative sample of primary schools in rural areas in the country for the survey study, all primary schools located in rural areas in a state or a union territory receiving full or partial financial aid from the government, or panchayati raj institutions and recognized by the concerned educational authority in the respective states, were treated as population of schools. Multi-stage random sampling technique was applied to select districts within a state, blocks in a district, and schools in a block. Depending on the total number of districts in a given state, the number of districts to be sampled for the survey study in a state was decided. In states like Bihar, Madhya Pradesh, Uttar Pradesh which had more than 45 districts in 1993, six districts were selected randomly by dividing the state map into six equal segments and drawing one district from each segment. From states with total number of districts between 18 and 44, four districts were sampled by dividing the state map into four equal segments and selecting randomly one district from each segment. Two districts were drawn randomly from states having total number of districts between 8 and 17, and one district was taken randomly from states with total number of districts between 2 and 7. In Jammu and Kashmir three districts were selected randomly, taking one district from each of three provinces in the state. A total of eighty districts were selected for the survey.

From the sampled district all the community development (CD) blocks were selected if their total number was ten or less than ten (base year 1993). In case total number of CD blocks exceeded ten in a sampled district, only ten blocks were selected randomly.

For selecting schools, all primary schools in the sampled block were taken into account and one hundred schools were selected, drawing the required number from each block proportionate to the total number of schools in that block. The only exception was Arunachal Pradesh where in each district total number of schools were about 100 only, and, therefore, only 50 schools were taken from each selected district. For each block/district a list of replacement schools was also prepared.

The computerized data base of schools in the country, created for the Sixth All India Educational Survey by the National Council of Educational Research and Training (NCERT), was utilized to draw the required number of schools from the respective states. Lists of sampled schools, giving village, block, district and state in which the sampled schools were located, were prepared for collecting information on the implementation status of the OB scheme. The districts selected in a state for the survey study are given in Annex 3. Location of sampled districts in respective states is shown in Annex 4. The number of schools covered in respective states is given in Table 4.

Table 4

No. of Schools included in the NSS Study in respective State and Union Territory

Sl. No.	State/Union Territory	No. of Schools Visited
1.	Andhra Pradesh	398
2.	Arunachal Pradesh	88
3.	Assam	401
4.	Bihar	585
5.	Goa	98
6.	Gujarat	400
7.	Haryana	200
8.	Himachal Pradesh	200
9.	Jammu & Kashmir	248
10.	Karnataka	393
11.	Kerala	216

Sl. No.	State/Union Territory	No. of Schools Visited
12.	Madhya Pradesh	599
13.	Maharashtra	401
14.	Manipur	200
15.	Meghalaya	190
16.	Mizoram	87
17.	Nagaland	162
18.	Orissa	364
19.	Punjab	200
20.	Rajasthan	396
21.	Sikkim	89
22.	Tamil Nadu	432
23.	Tripura	85
24.	Uttar Pradesh	587
25.	West Bengal	402
26.	Andaman & Nicobar Islands	92
27.	Delhi	100
28.	Pondicherry	106
	All States	7719

Respondents

In each sampled school the head teacher, all teachers up to a maximum number of four, five students of senior most class in school, three representatives of village community including one parent of student of senior most class in school, one member of Village Education Committee (VEC) preferably chairperson or treasure or any other member in that order (In case there is no VEC, office bearer of School Betterment Committee (SBE) or Parent Teacher Association (PTA). If neither SBC nor PTA is formed, an additional parent of student of senior most class in school. More than twelve thousand teachers (including head teachers) eighteen thousand community representatives, and thirty thousand students were interviewed

At the sampled block, district and state level, the official in charge of implementation of OB was also interviewed.

Parameters Probed

The study sought information on availability of the following in a school :

Physical Infrastructure

- Rooms for instructional purposes.
- Drinking water

- Toilets for boys and girls separately
- Blackboards

Pedagogical Material

- Teaching-learning-materials (TLMs)
- Contingency fund for repair/replacement of TLMs

Human Resources

- Teachers
- Special orientation of primary teachers (SOPT) to utilize TLMs
- Teachers qualifications
- Teachers perceptions of training received
- Sanctioned strength of teachers, actually in position, and vacancies.

Students Enrollment

- Gross Enrollment in 1986, 1993 and 1999
- Ratio of Enrollment in class 4/5 to enrollment in class 1
- Class-wise and sex-wise students average enrollment

Observations of field investigators were also collected on school climate and other aspects related to OB implementation in school.

Data Collection

Required information was collected personally by the trained field staff through interview mode. Secondary data was also taken into account.

Specially designed schedules were used for data collection from head teacher, other teachers and students in a school, parents of children in school and members of community associated with a village school , officials of Education Department at block, district and state level who were associated with the OB implementation on different aspects of the OB scheme. Field Investigators were also required to record their observations on implementation of the scheme in a school and related aspects. The schedules used in the survey along with the guidelines provided to the field staff are given at Annex 5 and 6.

State Level Survey Studies

State level survey studies were organized in collaboration with local or regional institutions having required experience to carry out educational surveys at primary school stage in rural areas. The survey design related tasks, including formulation of objectives, selection of samples of schools, preparation and finalization of schedules for data collection, methodology to be followed for data collection, data cleaning, procedures for data entry and analysis, and format for writing state reports, were decided and carried out centrally by the NIEPA Team. Collaborating institutions were associated and duly oriented in the procedures to be followed to carry out various tasks for the survey in the field. On-line assistance was provided by NIEPA throughout the study. Details of institutions involved in the respective state survey studies are given at Annex 7.

Data collection was completed in February-April 1999 in majority of the states and before March 2000 in the remaining states. Concerned authorities at state, district and block levels were taken in confidence and informed about the purpose of the survey study.

Findings

The OB scheme was expected to equip every school with certain basic infrastructure and human resources. As a part of this scheme every school was to have a minimum of two teachers and two classrooms, and certain other basic teaching-learning and other school equipment. In a recent report by the MHRD-NIEPA (Year 2000 Assessment-Education For All-India, April 2000), it is stated that "*Government of India has spent on an average about Rs. 400 million per year during the last ten years on this scheme. More than 1,82,000 classrooms have been built and 1,49,000 additional teachers appointed. Besides, 42,000 posts of teachers have been sanctioned to add a third teacher to primary schools with more than 100 enrollment. A standard set of school equipment has also been supplied to all primary schools*". The ground realities observed in the survey study, and presented in this report, however, revealed that the realization level of OB objectives varied considerably from state to state. State Survey Reports, presented separately, reflect district level differences also.

State of Physical Facilities

Classrooms : Average number of rooms available for instructional purpose in a school in a state, along with minimum and maximum number of classrooms, are presented in Table 5.

An average of 3.3 rooms in a school at the all India level apparently suggests that enough all weather physical space is available, and more than stipulated under OB Scheme (that is, a minimum of two rooms and a varandah). All India figures under the column "Minimum Classrooms" in Table 5, however, clearly indicates that zero classroom schools continue to exist even in the year 2000. In the same table, the column "Maximum Classrooms also indicates that there are some schools in the country which have as many as 26 classrooms, reflecting on the variation of availability of physical space from school to school in the country.

Table 5

Statewise Average, Minimum and Maximum Number of Classrooms in Primary Schools in 1999-2000

State	Total Schools Surveyed	Average No. of Classrooms	Minimum No. of Classrooms	Maximum No. of Classrooms
Andhra Pradesh	398	2.4	1	8
Arunachal Pradesh	88	2.8	0	8
Assam	401	1.9	0	8
Bihar	585	2.8	0	9
Goa	98	2.4	1	10
Gujarat	400	2.3	1	17
Haryana	200	4.8	0	26
Himachal Pradesh	200	3.5	1	12
Jammu& Kashmir	248	2.8	1	13
Karnataka	393	3.2	1	21
Kerala	216	4.9	1	9
Madhya Pradesh	599	2.9	1	13
Maharashtra	401	3.1	1	20
Manipur	200	3.2	0	13
Meghalaya	190	2.1	1	6
Mizoram	87	2.7	1	5
Nagaland	162	4.9	0	12
Orissa	364	3.3	1	11
Punjab	200	4.3	1	15
Rajasthan	396	5.0	1	16
Sikkim	89	4.5	2	8
Tamil Nadu	432	3.9	0	17
Tripura	85	3.3	0	7
Uttar Pradesh	587	2.8	0	9
West Bengal	402	2.8	1	9
A & N Islands	92	4.9	1	18
Delhi	100	8.5	2	22

State	Total Schools Surveyed	Average No. of Classrooms	Minimum No. of Classrooms	Maximum No. of Classrooms
Pondicherry	106	5	0	18
All States	**7719**	**3.3**	**0**	**26**

State-wise, Assam has the lowest average in terms of availability of physical space in a school (1.9) followed by Meghalaya (2.1), Gujarat (2.3), Goa and Andhra Pradesh (2.4), Mizoram (2.7) Arunachal Pradesh, Bihar, Jammu and Kashmir, Uttar Pradesh and West Bengal (2.8). In this context the better off states / union territories are Delhi (8.5), Pondicherry and Rajasthan (5.), Kerala, Nagaland and Andaman & Nicobar Islands (4.9), Haryana (4.8), Sikkim (4.5), and Punjab (4.3).

It may be noted that Delhi and Sikkim have the distinction of having a minimum of at least two rooms in every school in the state. Out of the remaining 26 states / union territories 10 states continue to have some schools without any room, and another 16 with some schools with just one room.

Improvement in availability of physical space in a school since 1993 is reflected in Table 6.

Table 6

Statewise Average Number of Classrooms in Primary Schools in 1993 and 1999

State	Average Number of Classrooms	
	1993	**1999**
Andhra Pradesh	1.8	2.4
Arunachal Pradesh	2.7	2.8
Assam	1.4	1.9
Bihar	1.2	2.8
Goa	2.2	2.4
Gujarat	1.9	2.3
Haryana	3.0	4.8
Himachal Pradesh	2.7	3.5

State	Average Number of Classrooms	
	1993	1999
Jammu & Kashmir	1.9	2.8
Karnataka	1.5	3.2
Kerala	5.9	4.9
Madhya Pradesh	2.2	2.9
Maharashtra	2.5	3.1
Manipur	3.1	3.2
Meghalaya	1.7	2.1
Mizoram	3.8	2.7
Nagaland	4.0	4.9
Orissa	2.4	3.3
Punjab	2.9	4.3
Rajasthan	2.8	5.0
Sikkim	3.5	4.5
Tamil Nadu	2.9	3.9
Tripura	3.1	3.3
Uttar Pradesh	2.7	2.8
West Bengal	2.2	2.8
Andaman & Nicobar Islands	3.4	4.9
Delhi	10.0	8.5
Pondicherry	4.4	5.0
All States	2.3	3.3

At all India level, there is noticeable improvement in physical space available in a school, which has increased from an average of 2.3 classrooms in 1993 to 3.3 classrooms in 1999. Statewise also, except Delhi, Kerala and Mizoram, all other states have registered a change, ranging from an increase of a minimum of 0.1 to a maximum of 2.2 classrooms (in Rajasthan).

Delhi, Kerala and Mizoram have shown a downward trend in availability of classrooms in a school, with a drop of 1.0 in Kerala, 1.1 in Mizoram and 1.5 in Delhi.

For a comparative study of availability of average number of classrooms in a school in a state over the years, Table 7 was derived from information available in the 5th and 6th All India Education Surveys, conducted by NCERT and information collected in the OB study. The table presents position of average number of classrooms in percentages, with zero, one, two, three, four and more than four classrooms in a school, in 1986, 1993 and 1999.

Table 7

State-wise Percentage of Zero, One, Two, Three, Four and More Than Four Classrooms in Primary Schools in 1986, 93, and 99

State	Year	Number of Classrooms					
		0	1	2	3	4	>4
Andhra Pradesh	1986	6.9	59.2	16.5	6.3	3.6	7.4
	1993	6.2	49.5	27.8	6.1	3.2	7.2
	1999	0.0	25.2	37.3	16.0	13.6	7.9
Arunachal Pradesh	1986	0.0	23.1	37.0	18.7	11.2	10.0
	1993	1.7	8.6	49.9	18.7	10.3	10.8
	1999	2.3	8.0	36.8	32.2	5.7	14.9
Assam	1986	0.0	70.5	12.8	6.3	6.9	3.5
	1993	19.0	52.3	10.8	7.3	9.1	1.5
	1999	0.8	60.4	14.2	4.7	16.3	3.7
Bihar	1986	18.0	35.1	33.7	8.2	3.5	1.5
	1993	38.4	16.6	35.3	5.9	2.6	1.2
	1999	0.5	8.8	25.2	5.06	9.7	5.2
Goa	1986	0.0	41.8	36.8	9.2	5.5	4.9
	1993	0.0	32.0	48.3	8.5	4.9	6.3
	1999	0.0	18.6	62.9	6.2	4.1	8.2
Gujarat	1986	2.4	6.1	21.0	5.9	4.0	5.9
	1993	5.6	42.9	35.2	7.3	4.1	4.9
	1999	0.0	22.6	52.0	15.5	5.8	4.1
Haryana	1986	4.4	17.4	33.0	18.6	10.9	15.7
	1993	5.7	10.9	32.6	20.5	12.4	17.9
	1999	0.5	3.6	16.7	20.8	13.5	44.8

State	Year	Number of Classrooms					
		0	1	2	3	4	>4
Himachal Pradesh	1986	3.6	28.3	34.1	18.3	8.6	7.1
	1993	1.7	17.4	35.1	22.6	11.7	11.5
	1999	0.0	6.7	21.3	29.2	19.1	23.6
Jammu & Kashmir	1986	3.7	50.3	29.9	9.4	4.1	2.7
	1993	11.1	24.4	38.6	19.6	3.3	3.0
	1999	0.0	16.9	25.2	39.3	8.3	10.3
Karnataka	1986	3.1	71.4	16.4	3.4	2.6	3.1
	1993	17.1	28.8	45.6	4.8	2.3	1.4
	1999	0.0	11.5	38.5	21.2	12.0	16.8
Kerala	1986	0.0	29.9	21.2	11.3	16.1	21.5
	1993	2.0	3.9	4.8	4.4	30.0	54.9
	1999	0.0	5.2	1.0	5.2	45.1	43.5
Madhya Pradesh	1986	7.3	35.1	34.2	13.6	4.0	5.9
	1993	10.2	21.7	38.9	16.5	5.7	7.0
	1999	0.0	10.7	31.4	30.9	18.0	9.1
Maharashtra	1986	2.9	51.7	18.8	5.4	6.0	15.1
	1993	7.8	36.8	27.8	6.5	8.3	12.8
	1999	0.0	12.3	44.2	14.3	12.8	16.4
Manipur	1986	0.0	11.4	24.0	39.3	11.0	14.2
	1993	2.8	4.8	33.9	26.9	12.7	15.9
	1999	2.5	9.0	26.0	22.5	25.5	14.5
Meghalaya	1986	0.0	67.8	16.1	9.7	3.9	2.5
	1993	6.0	45.6	26.4	14.0	6.9	1.1
	1999	0.0	33.7	37.4	16.8	10.0	2.1
Mizoram	1986	0.0	25.4	6.3	24.3	36.4	7.7
	1993	0.0	5.7	5.2	11.6	65.5	12.0
	1999	0.0	34.9	10.8	14.5	33.7	6.0
Nagaland	1986	0.0	0.3	6.1	21.3	22.0	50.3
	1993	0.0	0.5	14.6	10.0	50.4	24.5
	1999	4.3	0.6	1.2	4.3	12.3	77.2

State	Year	Number of Classrooms					
		0	1	2	3	4	>4
Orissa	1986	7.7	36.1	28.8	15.6	6.2	5.4
	1993	2.7	21.6	41.9	17.9	7.8	8.1
	1999	0.0	7.5	28.8	25.8	11.1	26.9
Punjab	1986	4.5	15.5	37.7	17.7	11.4	0.1
	1993	5.2	7.9	40.4	17.6	15.0	13.9
	1999	0.0	3.7	26.3	17.4	14.2	38.4
Rajasthan	1986	7.6	33.9	24.6	16.8	7.2	9.9
	1993	4.4	13.5	39.5	16.2	10.6	15.8
	1999	0.0	1.3	5.8	29.5	16.7	46.7
Sikkim	1986	1.7	9.2	29.7	25.4	12.6	21.3
	1993	2.3	1.5	35.1	17.4	13.9	29.8
	1999	0.0	0.0	12.4	10.8	20.2	57.3
Tamil Nadu	1986	0.0	38.8	23.0	10.9	5.9	21.3
	1993	8.0	25.3	30.3	9.5	6.2	20.7
	1999	3.7	11.8	21.5	10.4	7.4	45.1
Tripura	1986	3.5	29.7	20.4	15.3	10.8	20.3
	1993	2.4	20.3	24.6	11.7	12.9	28.1
	1999	7.1	5.9	17.6	24.7	12.9	31.8
Uttar Pradesh	1986	17.2	11.4	27.7	21.5	11.0	11.2
	1993	3.9	7.8	53.6	17.5	6.5	10.7
	1999	2.1	3.5	30.3	49.0	8.5	6.5
West Bengal	1986	4.9	28.8	23.5	18.8	16.9	7.2
	1993	11.7	28.6	23.5	15.9	13.1	7.2
	1999	0.0	16.6	32.4	24.0	17.6	9.4
Andaman & Nicobar Islands	1986	0.0	16.9	27.7	24.8	11.9	18.6
	1993	1.5	9.6	31.4	19.1	14.9	23.5
	1999	0.0	2.2	15.4	23.1	9.9	49.5
Delhi	1986	0.2	0.70	5.0	20.6	11.3	62.2
	1993	7.2	13.2	0.8	1.1	1.8	75.9
	1999	0.0	0.0	1.0	3.1	4.1	91.8

State	Year	Number of Classrooms					
		0	1	2	3	4	>4
Pondicherry	1986	0.0	23.0	15.6	10.3	11.5	39.5
	1993	0.0	8.9	22.1	10.7	13.7	44.6
	1999	2.8	9.4	19.8	7.5	6.6	53.8

The Table presents a bird's eye view of current (i.e. in 1999) status of availability of classrooms and comparison with their availability in 1993 and 1986, that is, immediately after the 1986 NPE interventions as well as at the time of mid-term evaluation of OB inputs and just before the launching of internationally funded projects (i.e. in 1993) like Bihar Education Project (BEP), UP Basic Education Project (UP, BEP), Andhra Pradesh Primary Education Project (APPEP) and Lok Jumbish Project (LJ) in respective states.

A closer look at '0' classroom column against the year 1999 in Table 7, shows that except in states like Manipur, Nagaland, Tamil Nadu, Tripura, and Uttar Pradesh, where percentage of zero classroom schools or schools without any building range from a high of 7.1% (Tripura) to a low 2.3% (Arunachal Pradesh), in all other states the percentage of zero classroom schools has come down to less than one or even zero per cent. Similarly, percentage of one-classroom schools in the country has shown improvement in varying degrees. Two-classroom schools have also recorded upward trend. Most satisfying, however, are the figures under column '4' and '>4' classrooms against Haryana (13.5% and 44.8%), Kerala (45.1% and 43.5%), Nagaland (12.3% and 77.2%), Punjab (14.2% and 38.4%), Sikkim (20.2% and 57.3%), Tamil Nadu (7.4% and 45.1%) Andaman and Nicobar Islands (9.9% and 49.5%) Delhi (4.1% and 91.8%) and Pondicherry (6.6% and 53.8%). In these states availability of four or more than four classrooms range from above 50% to almost 96%.

About quality of construction of school buildings, however, the findings of the Central Building Research Institute (CBRI), which was commissioned to study the construction aspect, are not encouraging. Details about the environment and user friendliness of building design or construction or maintenance are presented in chapter on Building Construction. Separate five state-reports on building component under OB scheme are also available.

Blackboards : It was recommended in OB scheme that wall-plastered blackboards should form part of construction component. Accordingly, an account of availability of wall-plastered blackboards as well as wooden and roll-up types of blackboards, is presented in Table 8.

Table 8

State wise Availability of Average Number of Blackboards in an OB and Non-OB School *(Wall Plastered, Wooden As Well As Roll Up)*

State		N	Average No. of BBs	BBs in Good Condition	Per Cent in Good Condition
Andhra Pradesh	OB	261	4.2	3.6	85.7%
	Non-OB	118	3.3	2.8	84.8%
Arunachal Pradesh	OB	38	3.5	2.0	57.1%
	Non-OB	50	2.4	0.6	25.0%
Assam	OB	388	2.5	1.6	64.0%
	Non-OB	9	1.9	1.3	68.4%
Bihar	OB	230	2.6	2.1	80.8%
	Non-OB	355	2.5	2.1	84.0%
Goa	OB	93	4.0	3.2	80.0%
	Non-OB	5	8.8	8.0	90.9%
Gujarat	OB	211	4.7	3.9	82.9%
	Non-OB	188	3.3	2.9	87.8%
Haryana	OB	200	9.6	7.8	81.2%
	Non-OB	0	N.A.	N.A.	N.A.
Himachal Pradesh	OB	200	6.1	4.2	68.8%
	Non-OB	0	N.A.	N.A.	N.A.
Jammu & Kashmir	OB	241	5.4	3.7	68.5%
	Non-OB	7	6.9	5.4	78.2%
Karnataka	OB	361	5.1	4.2	82.3%
	Non-OB	32	5.8	5.5	94.8%
Madhya Pradesh	OB	267	4.2	3.5	83.3%
	Non-OB	308	3.5	2.9	82.8%
Maharashtra	OB	361	6.8	5.8	85.2%
	Non-OB	40	8.6	7.5	87.2%
Manipur	OB	151	3.4	2.3	67.6%
	Non-OB	49	2.9	2.3	79.3%
Meghalaya	OB	111	3.9	3.2	82.0%
	Non-OB	79	3.4	2.5	73.5%
Mizoram	OB	13	3.4	0.8	23.5%
	Non-OB	74	3.5	1.9	54.2%
Nagaland	OB	128	5.5	2.5	45.4%
	Non-OB	34	5.1	2.5	49.0%

State		N	Average No. of BBs	BBs in Good Condition	Per Cent in Good Condition
Orissa	OB	332	4.8	3.7	77.0%
	Non-OB	32	4.3	3.0	69.7%
Punjab	OB	200	7.2	4.6	63.8%
	Non-OB	0	N.A.	N.A.	N.A.
Rajasthan	OB	345	6.3	5.1	80.9%
	Non-OB	51	3.1	2.6	83.8%
Sikkim	OB	21	4.6	2.9	63.0%
	Non-OB	68	5.1	2.6	50.9%
Tamil Nadu	OB	432	7.8	5.9	75.6%
	Non-OB	0	N.A.	N.A.	N.A.
Tripura	OB	73	3.8	2.5	65.7%
	Non-OB	12	3.7	2.3	62.1%
Uttar Pradesh	OB	437	4.9	4.0	81.6%
	Non-OB	148	3.6	3.0	83.3%
West Bengal	OB	394	4.3	2.8	65.1%
	Non-OB	8	1.4	0.6	42.8%
Andaman & Nicobar Island	OB	57	6.7	5.7	85.0%
	Non-OB	35	5.7	4.9	85.9%
Delhi	OB	85	9.1	7.4	81.3%
	Non-OB	15	9.7	8.4	86.5%
Pondicherry	OB	106	9.1	6.5	71.4%
	Non-OB	0	N.A.	N.A.	N.A.
All States	**OB**	**5952**	**5.5**	**4.2**	**76.3%**
	Non-OB	**1717**	**3.6**	**2.8**	**77.7%**

In Table 8 schools have been classified as OB and Non-OB in each state, meaning thereby that OB schools were included under the OB scheme for provision of basic facilities and Non-OB schools did not require the OB scheme provisions, or were not provided facilities under OB scheme. It may also be pointed out that in some cases the total of OB and Non-OB schools might not add up to the number given in Table 4, because in Table 8 schools which provided partial or incomplete information to field-investigators were not considered. "NA" indicates that all schools in the sample were provided OB facilities or no non-OB school was in the sample of schools examined in the study.

Availability of blackboards in OB as well as non-OB schools at all India level is quite encouraging. An average of 5.5 blackboards in a school are available in OB schools, compared to 3.6 in Non-OB schools. About three-fourth of available blackboards in OB and non-OB schools are in good condition. Field investigators' observations indicate that many of the available blackboards in schools, and in good condition, were not "in use". In terms of numbers, OB schools have more blackboards available in good condition compared to Non-OB schools. Even in non-OB schools the average number of available blackboards in good condition is more than two. Only exceptions are Assam, Mizoram, and Non-OB schools of Arunachal Pradesh and West Bengal, where availability of blackboards in good condition is less than one.

It is interesting to note that operationally, the "Operation" part of Operation Blackboard Scheme, in terms of availability of blackboards in good condition, has come out to be quite successful. It is totally a different matter whether available blackboards are in use or not. Investigators' observations suggest that available blackboards were not being utilised optimally. Mostly "talk and talk" technique of teaching was observed rather than the classical "chalk-and-talk" which utilises blackboards. Findings of Case-Studies suggest that blackboard is used primarily to display solved questions which students could copy easily, memorise and reproduce at the time of examination. Details on this aspect are given in chapter on Case Studies of Village Schools.

Toilet Facilities : Provision of separate toilets for boys and girls was a part of OB scheme. Availability of toilets in-use is reflected in Table 9.

Table 9

Statewise Percentage of Availability of Drinking Water and Toilets in OB and Non-OB Schools within a State

State	Drinking Water		Toilets for All		Toilets for Girls only	
	OB	*Non-OB*	*OB*	*Non-OB*	*OB*	*Non-OB*
Andhra Pradesh	40.5	30.7	0.8	7.0	0.8	4.1
Arunachal Pradesh	44.7	23.4	26.3	8.5	0.0	2.1
Assam	36.3	25.0	14.1	0.0	4.3	0.0
Bihar	41.0	36.5	15.8	11.4	11.7	5.7
Goa	71.4	75.0	19.8	75.0	10.1	25.0
Gujarat	31.9	30.4	9.0	5.4	4.8	3.3
Haryana	71.9	N.A.	42.7	N.A.	19.8	N.A.
H. P.	65.8	N.A.	17.5	N.A.	13.5	N.A.
J & K	24.8	57.1	31.5	42.9	20.6	42.9

State	Drinking Water		Toilets for All		Toilets for Girls only	
	OB	*Non-OB*	*OB*	*Non-OB*	*OB*	*Non-OB*
Karnataka	49.6	56.3	11.4	40.6	6.4	25.0
Kerala	80.0	N.A.	74.3	N.A.	56.8	N.A.
Madhya Pradesh	53.0	44.8	9.4	7.1	4.5	3.3
Maharashtra	42.6	34.2	10.9	15.8	6.2	5.3
Manipur	28.3	52.4	8.0	9.5	4.3	9.5
Meghalaya	11.0	11.5	6.4	10.3	3.7	3.8
Mizoram	30.8	26.0	0.0	14.1	0.0	0.0
Nagaland	18.9	9.1	3.9	9.1	0.0	3.0
Orissa	58.2	45.2	10.3	12.5	6.2	0.0
Punjab	85.0	N.A.	40.0	N.A.	24.6	N.A.
Rajasthan	69.8	54.9	42.7	25.5	28.8	15.7
Sikkim	19.0	13.2	19.0	5.9	4.8	4.4
Tamil Nadu	64.2	N.A.	18.1	N.A.	12.9	N.A.
Tripura	35.6	33.3	21.9	25.0	1.4	0.0
Uttar Pradesh	60.6	61.3	28.2	20.4	23.8	10.2
West Bengal	42.6	37.5	20.9	0.0	7.6	0.0
A & N Islands	86.0	77.1	78.6	57.1	50.0	48.6
Delhi	84.3	80.0	80.0	80.0	57.1	53.3
Pondicherry	66.3	N.A.	63.5	N.A.	48.1	N.A.
All States	**52.0**	**38.2**	**23.1**	**13.1**	**14.6**	**6.9**

The Table presents statewise percentage of availability of toilets in OB and non-OB schools for all, as well as separately for girls. Availability of drinking water is also shown.

Figures in the last row of the table provide an indication that separate toilet facilities for girls in primary schools, which are mostly co-educational in rural areas, exist in only a small percentage of schools; on an average only 14.6 per cent schools under OB scheme have such facilities, whereas the expected percentage is 100 (as visualised in OB scheme). Non-OB schools have about seven per cent schools with such facilities. The figures in this context are slightly better for toilets for all, that is, common toilets for boys and girls. 23.1% OB-schools have the facilities, compared to only 13.1% in Non-OB schools.

Kerala, A & N Islands, Delhi and Pondicherry have around 50% OB schools with separate toilets for girls.

Drinking water availability is limited to a little over fifty percent (52.0) in OB-schools and a little under forty percent (38.2%), in non-OB schools. There are wide variations between the states. Among the states only Kerala, Punjab, A & N Islands and Delhi have around 80 per cent OB schools with these facilities. Meghalaya, Nagaland and Sikkim have less than twenty per cent OB schools with such facilities.

Toilet facilities were also examined in the study on School Building Construction. Findings stated in previous paras are substantiated by the Building Construction study. Details are reported in the respective chapter.

TLMs : Every primary school covered under OB scheme was to be provided a set of teaching-learning-materials to facilitate improvement in quality of teaching. Table 10 presents information on availability of recommended common items in OB schools in 1999-2000.

Statewise and itemwise pedagogical aids supplied to primary schools in OB scheme are given in the above Table in terms of their availability in percentages. Eleven items of teaching-learning-materials provided, which are included in the Table, are the common items supplied to schools by the states. It may be noted that, initially, a common set of TLMs was recommended by the MHRD. After the mid-term assessment of implementation of the scheme in 1992, which pointed out that many of the items supplied to schools were not found useful by teachers, certain core items were retained from the original recommended list, and states were advised to select other items, within the limits of financial assistance provided by

Table 10

State-wise Availability of Teaching Learning Materials in OB Schools

(Figures in Percentages)

State	Teaching Learning Materials										
	Maps	Globe	Edl. Charts	Toys / Wisdom Blocks	Birds / Animals	Games equip-ment	Science Kit	Maths Kit	Tools Kit	Musical Instru-ments	Books
	1	2	3	4	5	6	7	8	9	10	11
Andaman & Nicobar	87.0	90.7	88.5	88.9	86.5	90.6	49.0	70.0	18.8	78.8	94.3
Andhra Pradesh	55.1	44.9	46.2	39.2	38.8	47.4	52.5	55.4	52.9	54.5	83.6
Arunachal Pradesh	83.3	75.0	70.8	41.7	54.2	62.5	60.9	56.5	47.8	39.1	34.8
Assam	80.4	86.8	54.6	41.5	28.3	85.4	77.6	61.5	28.3	60.1	83.1
Bihar	51.6	40.6	34.2	18.7	21.3	22.6	0.6	0.6	1.9	1.9	63.4
Delhi	83.5	80.0	83.5	85.9	77.6	83.5	90.6	84.7	84.5	54.9	94.1
Goa	90.4	94.7	90.3	92.6	93.6	90.3	75.3	88.3	89.4	92.6	97.8
Gujarat	78.7	51.2	82.9	43.6	53.1	41.2	36.5	50.7	29.9	37.4	43.5
Haryana	89.7	67.0	76.8	52.3	60.8	49.2	87.1	81.4	57.2	21.4	65.0
Himachal Pradesh	85.3	75.1	77.2	88.9	85.3	84.1	91.1	80.5	80.0	83.2	92.6
Jammu & Kashmir	93.1	73.2	72.3	47.2	50.6	81.8	81.8	70.1	51.7	59.7	85.2
Karnataka	90.6	85.5	82.5	77.2	69.6	89.2	89.2	87.9	73.9	73.3	93.0
Kerala	91.0	74.8	89.0	92.8	91.4	86.7	94.3	95.3	89.1	91.1	96.2

State	Teaching Learning Materials										
	Maps	Globe	Edl. Charts	Toys / Wisdom Blocks	Birds / Animals	Games equip-ment	Science Kit	Maths Kit	Tools Kit	Musical Instru-ments	Books
	1	2	3	4	5	6	7	8	9	10	11
Madhya Pradesh	62.5	47.6	57.3	67.8	57.9	63.3	79.0	76.8	60.8	41.7	63.3
Maharashtra	87.7	78.3	83.6	82.2	76.7	87.7	94.8	90.2	79.9	48.9	91.6
Manipur	86.8	55.6	70.9	24.5	21.2	59.6	40.4	10.6	33.8	41.7	41.7
Meghalaya	41.4	17.1	52.3	9.0	27.0	18.0	15.3	13.5	1.8	5.4	25.2
Mizoram	75.0	100.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0
Nagaland	60.9	40.6	52.3	12.5	15.6	28.1	18.0	12.5	5.5	4.7	1.6
Orissa	83.3	68.7	73.6	78.0	77.0	80.7	86.1	85.8	74.3	71.6	76.2
Pondicherry	59.4	75.5	56.6	65.1	66.0	79.2	78.3	80.2	67.0	63.2	73.6
Punjab	54.5	64.2	41.1	36.3	24.7	57.9	90.0	84.7	48.1	85.3	88.4
Rajasthan	82.9	54.8	67.5	61.2	63.2	71.6	59.1	56.2	53.3	57.7	90.1
Sikkim	87.5	68.8	75.0	43.8	43.8	68.8	37.5	50.0	31.3	43.8	50.0
Tamil Nadu	100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	0.0	100.0	100.0
Tripura	89.9	72.5	88.4	21.7	55.1	47.8	79.7	81.4	50.0	14.5	76.5
Uttar Pradesh	60.7	69.1	59.7	70.4	54.4	63.5	71.5	68.8	58.9	58.2	78.4
West Bengal	96.6	94.2	90.8	74.5	87.1	97.9	81.4	90.3	33.9	19.2	93.4
All States	**75.1**	**67.3**	**66.9**	**58.1**	**56.4**	**68.3**	**69.5**	**67.5**	**52.1**	**51.9**	**75.2**

the GOI, suited to their local requirements, and in consultation with teachers and community. Many states exercised this autonomy and decided on items, which differed from state to state. The eleven items in the table, therefore, do not include all items provided by the respective states under the scheme.

One hundred per cent figure appears only for Tamil Nadu under 7 out of 11 items in the table, which is a clear indication that every school was provided these items. Other items, perhaps were not considered necessary by the state authorities as zero percent availability was found in the case of Toys/Wisdom Blocks, Birds/Animals, and Tools Kit. The only other state which shows one hundred percent availability of any single item is Mizoram which provided Globe to every school. However, other core items were either not provided or provided partially (limited to 25% in the case of Games equipment, and Tools Kit).

In other states percentage of availability of various items varied considerably. Item-wise range of variation is given below :

Maps : 41% (in Meghalaya) to 100% (in Tamil Nadu)
Globe : 40.6% (in Nagaland) to 100% (in Tamil Nadu)
Educational Charts : 0.0% (in Mizoram) to 100% (in Tamil Nadu)
Toys/Wisdom Blocks : 0.0% (in Mizoram and Tamil Nadu) to 92.8% (in Kerala)
Birds / Animals : 0.0% (in Mizoram and Tamil Nadu) to 93.6% (in Goa).
Games Equipment : 18.0% (in Meghalaya) to 100% (in Tamil Nadu)
Science Kit : 0.0% (in Mizoram) to 100% (in Tamil Nadu)
Mathematics Kit : 0.0% (in Mizoram) to 100% (in Tamil Nadu)
Tools Kit : 0.0% (in Tamil Nadu) to 89.4% (in Goa)
Musical Instruments : 0.0% (in Mizoram) to 100% (in Tamil Nadu)
Books : 0.0% (in Mizoram) to 100% (in Tamil Nadu)

Within states, least availability of various items is observed in Bihar, with a low of 0.6% (Science and Maths Kits) and a high of 63.4% (Books).

National level availability percentage of various items range from 51.9% (Musical Instruments) to 75.2% (Books).

Availability of Contingency Fund

Provision of some fund for maintenance, repair or replacement of TLMs was visualized in OB scheme. One-time investment on procurement of the TLM package worth Rs. 7215/-

initially, and enhanced to Rs. 10,000/- in the modified scheme was made by the central government . The contingency fund was to be provided by the concerned state government. To find out whether this fund was available in primary schools, head-teacher of primary schools were specifically probed in this respect. Table 11 presents figures regarding availability of contingency fund, the amount, and its adequacy or inadequacy.

Table 11

Statewise Percentage of Contingency Funds Available to OB and Non-OB Schools, and Schools in General, Amount Available and Level of Inadequacy

States	Contingency Funds Available			Contingency Amount Available				Available Contingency Not Adequate
	OB	Non-OB	Total	<Rs.500/-	Rs.501-1000	Rs.1001-2000	Above Rs.2000/-	
Andhra Pradesh	15.6	19.2	16.8	82.5	7.9	9.5	0.0	79.4
Arunachal Pradesh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Assam	3.6	0.0	3.5	50.0	12.5	37.5	0.0	92.9
Bihar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Goa	59.1	20.0	57.1	100.0	0.0	0.0	0.0	92.9
Gujarat	31.1	11.7	22.0	58.8	0.0	36.8	4.4	91.5
Haryana	9.5	N.A.	9.5	27.8	5.6	66.7	0.0	37.5
Himachal Pradesh	69.5	N.A.	69.5	100.0	0.0	0.0	0.0	72.8
Jammu & Kashmir	67.6	57.1	67.3	98.8	0.6	0.0	0.6	94.6
Karnataka	4.7	0.0	4.3	52.9	41.2	5.9	0.0	86.7
Kerala	12.6	N.A.	12.6	92.6	3.7	0.0	3.7	100.0
Madhya Pradesh	18.8	14.4	16.5	60.6	18.2	12.1	9.1	87.5
Maharashtra	37.2	97.5	97.2	1.0	4.7	26.9	67.4	38.6
Manipur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meghalaya	1.8	2.5	2.1	100.0	0.0	0.0	0.0	75.0
Mizoram	53.8	39.2	41.4	6.3	18.8	18.8	56.3	88.6
Nagaland	5.5	8.8	6.2	50.0	10.0	0.0	40.0	70.0
Orissa	5.7	9.4	6.0	95.2	0.0	0.0	4.8	86.4
Punjab	16.0	N.A.	16.0	20.0	73.3	3.3	3.3	71.9

States	Contingency Funds Available			Contingency Amount Available				Available Contingency Not Adequate
	OB	Non-OB	Total	<Rs.500/-	Rs.501-1000	Rs.1001-2000	Above Rs.2000/-	
Rajasthan	90.4	21.6	81.6	88.9	10.5	0.6	0.0	68.7
Sikkim	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tamil Nadu	66.9	N.A.	66.9	94.5	1.4	1.7	2.4	79.9
Tripura	93.2	91.7	92.9	81.0	19.0	0.0	0.0	75.6
Uttar Pradesh	11.4	10.1	11.1	76.9	23.1	0.0	0.0	73.4
West Bengal	99.7	100.0	99.8	100.0	0.0	0.0	0.0	93.8
A & N Islands	52.6	42.9	48.9	64.3	26.2	9.5	0.0	77.8
Delhi	94.1	66.7	90.0	100.0	0.0	0.0	0.0	82.7
Pondicherry	28.3	N.A.	28.3	93.3	6.7	0.0	0.0	63.3
All States	**37.9**	**14.0**	**32.5**	**72.8**	**6.6**	**7.6**	**13.0**	**75.1**

N.A. : Not Applicable, i.e. No Non-OB Schools

Figures in the Table show that more OB schools (37.9%) had some contingency fund than non-OB schools (14.0%). All India average, irrespective of OB or non-OB schools, comes to 32.5%. In other words, only about one out of every three schools in the country have such a fund available. Statewise, in West Bengal 99.8% schools have such a fund, followed by Maharashtra (97.2%) , Tripura (92.9%), Delhi (90.0%) and Rajasthan (81.6%). States like Arunachal Pradesh, Bihar, Manipur and Sikkim do not have any such fund, whereas Assam (3.5%), Karnataka (4.3%) and Meghalaya (2.1%), have less than 5% schools with such a fund available. Between OB and non-OB schools, in states like Rajasthan there is a marked difference, as in OB schools 90.4% have this fund, whereas among non-OB schools only 21.6% have the fund. The situation is just the reverse in the case of Maharashtra where 97.5% non-OB schools have the fund compared to only 37.2% OB-schools.

Regarding the contingency amount available, at all India level 72.8% schools have Rs. 500 or less, available with them, 6.6% have an amount between Rs. 1001 and Rs. 2000/-, and 13.0% more than Rs. 2000/-. Maharashtra, Mizoram and Nagaland have schools with more than Rs. 2000/- available in 40% to 67.4% schools. Goa, Himachal Pradesh, Meghalaya, west Bengal and Delhi have Rs. 500/- available with every primary school in the state, whereas states like Arunachal Pradesh, Bihar, Manipur and Sikkim do not have any such fund in any of the school in the state.

The only state which is relatively more satisfied with available amount of contingency fund is Maharashtra. Otherwise, at all India level 75.1% consider the amount to be inadequate.

Community Involvement

As a follow-up of the recommendation, which emerged out of the mid-term evaluation of OB implementation in 1992-93, it was emphasized that local community representatives and school teachers should be involved in the process of selection of the TLMs as well as the management of schools, especially its maintenance. The OB study, therefore, looked into this aspect. A total of about twenty thousand community representatives, at village level, were interacted with to get near to the ground realities in this context. Table 12 presents the distribution of various representatives of the village community.

Table 12

Number and Percentage of Representatives of Village Community who Participated in OB Survey Study

Community Representatives		N	%
Village Education Committee	(VEC)	4543	21.7
School Betterment Committee	(SBC)	1553	7.4
Parent Teacher Association	(PTA)	1498	7.2
Village Panchayat Member	(VPM)	5542	26.5
Parents	(P)	7757	37.1
Total		**20893**	**100.0**

It may be noted from the Table that percentage of SBC and PTA members, together, is about 15%, of VEC about 22%, and more than 50% of village panchayat members and parents of students studying in the village primary schools.

To look into rather low level of involvement of SBC, PTA and VEC, the length of time these committees have been in existence was probed. Table 13 provides statewise information in this context.

Table 13

Statewise Committees of Community Representatives in Rural Areas and Their Period of Existence

State	Village Education Committee								School Betterment Committee								Parent Teacher Association								Total	
	>10 Years		5-10 Years		<5 Years		Total		>10 Years		5-10 Years		<5 Years		Total		>10 Years		5-10 Years		<5 Years		Total			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Andhra Pradesh	6	1.9	7	2.3	298	95.8	311	100.0	14	20.9	2	3.0	51	76.1	67	100.0	6	5.1	7	5.9	105	89.0	118	100.0	496	100.0
Arunachal Pradesh	1	100.0	0	0.0	0	0.0	1	100.0	3	60.0	1	20.0	1	20.0	5	100.0	0	0.0	1	0.0	0	0.0	1	100.0	7	100.0
Assam	2	1.2	12	7.1	154	91.7	168	100.0	22	11.8	22	11.8	143	76.5	187	100.0	1	8.3	6	50.0	5	41.7	12	100.0	367	100.0
Bihar	19	3.2	62	10.5	508	86.2	589	100.0	1	9.1	2	18.2	8	72.7	11	100.0	1	33.3	0	0.0	2	66.7	3	100.0	60.3	100.0
Delhi	2	40.0	1	20.0	2	40.0	5	100.0	82	83.7	11	11.2	5	5.1	98	100.0	82	83.7	11	11.2	5	5.1	98	100.0	103	100.0
Goa	2	100.0	0	0.0	0	0.0	2	100.0	3	60.0	2	40.0	0	0.0	5	100.0	27	34.6	32	41.0	19	24.4	78	100.0	85	100.0
Gujarat	15	12.6	5	4.2	99	83.2	119	100.0	1	2.6	6	15.8	31	81.6	38	100.0	16	12.6	5	3.9	106	83.5	127	100.0	284	100.0
Haryana	1	1.7	7	11.9	51	86.4	59	100.0	0	0.0	1	50.0	1	50.0	2	100.0	23	39.0	20	33.9	16	7.1	59	100.0	120	100.0
Himachal Pradesh	3	3.2	7	7.4	85	89.5	95	100.0	0	0.0	0	0.0	4	100.0	4	100.0	9	12.2	20	27.0	45	60. 8	74	100.0	173	100.0
J & K	11	9.9	16	14.4	84	75.7	111	100.0	2	13.3	10	66.7	3	20.0	15	100.0	1	4.8	15	7 1.4	5	23.8	21	100.0	147	100.0
Karnataka	18	13.2	31	22.8	87	64.0	136	100.0	127	51.4	70	28.3	50	20.2	247	100.0	0	0.0	3	50.0	3	50.0	6	100.0	389	100.0
Kerala	221	88.4	16	6.4	13	5.2	250	100.0	5	29.4	1	5.9	11	64.7	17	100.0	3	23.1	4	30.8	6	46.2	13	100.0	280	100.0
Madhya Pradesh	67	15.0	63	14.1	316	70.9	446	100.0	31	21.4	31	21.4	83	57.2	145	100.0	20	20.6	11	11.3	66	68.0	97	100.0	688	100.0
Maharashtra	71	22.7	171	54.6	71	22.7	313	100.0	6	15.8	17	44.7	15	39.5	38	100.0	7	12.7	23	41.8	25	45.5	55	100.0	406	100.0
Manipur	33	84.6	4	10.3	2	5.1	39	100.0	35	26.9	24	18.5	71	54.6	130	100.0	5	26.3	3	15.8	11	57.9	19	100.0	188	100.0

State	Village Education Committee								School Betterment Committee								Parent Teacher Association								Total	
	>10 Years		5-10 Years		<5 Years		Total		>10 Years		5-10 Years		<5 Years		Total		>10 Years		5-10 Years		<5 Years		Total			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Meghalaya	64	58.2	36	32.7	10	9.1	110	100.0	35	70.0	12	24.0	3	6.0	50	100.0	1	7.1	9	64.3	4	28.6	14	100.0	174	100.0
Mizoram	2	66.7	0	0.0	1	33.3	3	100.0	16	59.3	4	14.8	7	25.9	27	100.0	5	38.5	5	38.5	3	23.1	13	100.0	43	100.0
Nagaland	60	46.9	53	41.4	15	11.7	128	100.0	2	100.0	0	0.0	0	0.0	2	100.0	4	80.0	1	20.0	0	0.0	5	100.0	135	100.0
Orissa	30	46.9	4	6.3	30	46.9	64	100	8	53.3	4	26.7	3	20.0	15	100.0	121	33.2	97	26.6	147	40.3	365	100.0	444	100.0
Punjab	51	34.0	60	40.0	39	26.0	150	100.0	0	0.0	0	0.0	2	100.0	2	100.0	0	0.0	3	100.0	0	0.0	3	100.0	155	100.0
Rajasthan	37	16.6	30	13.5	156	70.0	223	100.0	9	29.0	6	19.4	16	51.6	31	100.0	4	6.0	8	11.9	55	82.1	67	100.0	321	100.0
Sikkim	14	63.6	6	27.3	2	9.1	22	100.0	26	52.0	19	38.0	5	10.0	50	100.0									72	100.0
Tamil Nadu	190	47.3	93	23.1	119	29.6	402	100.0	10	45.5	5	22.7	7	31.8	22	100.0	5	20.0	7	28.0	13	52.0	25	100.0	449	100.0
Tripura	1	50.0	1	50.0	0	0.0	2	100.0	20	14.5	29	21.0	89	64.5	138	100.0	2	18.2	9	81.8	0	0.0	11	100.0	151	100.0
Uttar Pradesh	132	28.0	135	28.6	205	43.4	472	100.0	2	40.0	3	60.0	0	0.0	5	100.0	7	38.9	2	11.1	9	50.0	18	100.0	495	100.0
West Bengal	22	29.7	21	28.4	31	41.9	74	100.0	95	37.0	52	20.2	110	42.8	257	100.0	14	21.5	10	15.4	41	63.1	65	100.0	396	100.0
A & N Islands	52	61.9	14	16.7	18	21.4	84	100.0	2	50.0	1	25.0	1	25.0	4	100.0	1	16.7	2	33.3	3	50.0	6	100.0	94	100.0
Pondicherry	21	24.7	17	20.0	47	55.3	85	100.0	1	14.3	0	0.0	6	85.7	7	100.0	1	10.0	1	10.0	8	80.0	10	100.0	102	100.0
Total	**1146**	**25.7**	**871**	**19.5**	**2441**	**54.8**	**4458**	**100.0**	**478**	**31.3**	**325**	**21.3**	**723**	**47.4**	**1526**	**100.0**	**336**	**26.5**	**315**	**22.8**	**702**	**50.8**	**1383**	**100.0**	**7367**	**100.0**

Figures in the Table under "Village Education Committee" suggest that except in Kerala, Manipur and A & N Islands, where the existence of such a Committee has been in existence in more than 60 per cent cases for more than 10 years, in many other states the VECs have come up during last five or five to ten years only. Existence of SBC or PTA or the like has been for a longer time in states like Delhi, Goa, Meghalaya, Manipur, Mizoram, Sikkim, Tamil Nadu and West Bengal. At all India level, the percentage of VECs in existence for less than five years is 54.8%, 5 to 10 years, 19.5%, and more than 10 years, 25.7%. SBCs in existence for less than 5 years are 47.4%, between 5 and 10 years, 21.3%, and more than 10 years, 31.3%. Position of PTAs in existence for less than 5 years is 50.8%, between 5 to 10 years, 22.8%, and more than 10 years, 26.5%.

Statewise distribution of various representatives of village community in school affairs, and particularly in attending school functions and enrollment campaigns is reflected in Table 14.

All India figures at the end of the Table suggest that community involvement in enrollment campaigns has been to the tune of 73.4%, compared to 52.4% in attending school functions. Community response varies from state to state, with 80% or more in states of Assam, Maharashtra and West Bengal in attending School Functions, and in Bihar, Jammu & Kashmir, Maharashtra and Meghalaya in respect of Enrollment Campaigns. Amongst the states, Maharashtra leads in community involvement in school affairs like attending school functions and enrollment campaigns with more than 80% involvement.

Schools with Basic Physical Infrastructure

Out of the available data, a table was created showing percentage of schools in respective states which have two or more classrooms, TLMs package with or without all items, availability of drinking water within school premises, separate toilets for girls, and playground attached to school. Table 15 presents respective figures.

The "All States" row at the base of the table indicates that 85.65% schools have two or more classrooms. Out of these 74.38% have some items of the TLMs package out of the selected eleven common items. Out of schools with two or more rooms, with some TLMs, 40.54% have drinking water facility. Percentage of schools with two or more classrooms, some TLMs, drinking water and separate toilets for girls is 9.51. All India percentage of schools with above mentioned infrastructure facilities and playground, as visualized in OB scheme in 1987, is only 7.45 in 1999-2000.

Table 14

Statewise Participation of Representatives of Village Community in Primary School Functions and Enrolment Campaigns

VEC : Village Education Committee
SBC : School Betterment Committee
PTA : Parent Teacher Association
Panchayat : Panchayat Members
Parents : Father, Mother of Student of Senior Most Class in School

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Andhra Pradesh	VEC	123	39.0	192	61.0	315	100.0	271	85.8	45	14.2	316	100.0
	SBC	62	92.5	5	7.5	67	100.0	63	94.0	4	6.0	67	100.0
	PTA	58	39.2	90	60.8	148	100.0	108	73.0	40	27.0	148	100.0
	PANCHAYAT	14	30.4	32	69.6	46	100.0	41	87.2	6	12.8	47	100.0
	PARENTS	335	54.6	278	45.4	613	100.0	446	71.9	174	28.1	620	100.0
	Total	**592**	**49.8**	**597**	**50.2**	**1189**	**100.0**	**929**	**77.5**	**269**	**22.5**	**1198**	**100.0**
Arunachal Pradesh	VEC	1	33.3	2	66.7	3	100.0	2	66.7	1	33.3	3	100.0
	SBC	1	20.0	4	80.0	5	100.0	5	100.0	0	0.0	5	100.0
	PTA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	PANCHAYAT	42	61.8	26	38.2	68	100.0	50	61.7	31	38.3	81	100.0
	PARENTS	51	35.9	91	64.1	142	100.0	74	44.3	93	55.7	167	100.0
	Total	**95**	**43.6**	**123**	**56.4**	**218**	**100.0**	**131**	**51.2**	**125**	**48.8**	**256**	**100.0**
Assam	VEC	151	89.3	18	10.7	169	100.0	144	85.2	25	14.8	169	100.0
	SBC	168	89.8	19	10.2	187	100.0	158	84.9	28	15.1	186	100.0
	PTA	14	93.3	1	6.7	15	100.0	9	60.0	6	40.0	15	100.0
	PANCHAYAT	163	80.7	39	19.3	202	100.0	144	70.9	59	29.1	203	100.0
	PARENTS	509	88.1	69	11.9	578	100.0	444	77.1	132	22.9	576	100.0

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
	Total	**1005**	**87.3**	**146**	**12.7**	**1151**	**100.0**	**899**	**78.2**	**250**	**21.8**	**1149**	**100.0**
Bihar	VEC	25	4.2	564	95.8	589	100.0	554	94.1	35	5.9	589	100.0
	SBC	1	9.1	10	90.9	11	100.0	10	90.9	1	9.1	11	100.0
	PTA	0	0.0	3	100.0	3	100.0	2	66.7	1	33.3	3	100.0
	PANCHAYAT	17	3.5	474	96.5	491	100.0	446	90.8	45	9.2	491	100.0
	PARENTS	104	12.9	700	87.1	804	100.0	659	82.0	145	18.0	804	100.0
	Total	**147**	**7.7**	**1751**	**92.3**	**1898**	**100.0**	**1671**	**88.0**	**227**	**12.0**	**1898**	**100.0**
Goa	VEC	2	100.0	0	0.0	2	100.0	1	50.0	1	50.0	2	100.0
	SBC	0	0.0	5	100.0	5	100.0	5	100.0	0	0.0	5	100.0
	PTA	41	51.9	38	48.1	79	100.0	55	69.6	24	30.4	79	100.0
	PANCHAYAT	7	33.3	14	66.7	21	100.0	12	57.1	9	42.9	21	100.0
	PARENTS	17	42.5	23	57.5	40	100.0	25	62.5	15	37.5	40	100.0
	Total	**67**	**45.6**	**80**	**54.4**	**147**	**100.0**	**98**	**66.7**	**49**	**33.3**	**147**	**100.0**
Gujarat	VEC	64	51.6	60	48.4	124	100.0	98	79.0	26	21.0	124	100.0
	SBC	22	50.0	22	50.0	44	100.0	37	84.1	7	15.9	44	100.0
	PTA	66	45.2	80	54.8	146	100.0	115	78.8	31	21.2	146	100.0
	PANCHAYAT	119	59.2	82	40.8	201	100.0	149	73.8	53	26.2	202	100.0
	PARENTS	132	54.3	111	45.7	243	100.0	170	70.8	70	29.2	240	100.0
	Total	**403**	**53.2**	**355**	**46.8**	**758**	**100.0**	**569**	**75.3**	**187**	**24.7**	**756**	**100.0**
Haryana	VEC	30	50.8	29	49.2	59	100.0	43	72.9	16	27.1	59	100.0
	SBC	1	50.0	1	50.0	2	100.0	2	100.0	0	0.0	2	100.0
	PTA	45	77.6	13	22.4	58	100.0	45	76.3	14	23.7	59	100.0
	PANCHAYAT	90	64.7	49	35.3	139	100.0	103	74.1	36	25.9	139	100.0
	PARENTS	33	55.9	26	44.1	59	100.0	43	71.7	17	28.3	60	100.0
	Total	**199**	**62.8**	**118**	**37.2**	**317**	**100.0**	**236**	**74.0**	**83**	**26.0**	**319**	**100.0**
Himachal Pradesh	VEC	48	50.5	47	49.5	95	100.0	81	85.3	14	14.7	95	100.0
	SBC	4	100.0	0	0.0	4	100.0	2	50.0	2	50.0	4	100.0

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
	PTA	45	60.0	30	40.0	75	100.0	51	68.0	24	32.0	75	100.0
	PANCHAYAT	70	46.4	81	53.6	151	100.0	118	78.1	33	21.9	151	100.0
	PARENTS	45	32.1	95	67.9	140	100.0	109	76.2	34	23.8	143	100.0
	Total	**212**	**45.6**	**253**	**54.4**	**465**	**100.0**	**361**	**77.1**	**107**	**22.9**	**468**	**100.0**
Jammu & Kashmir	VEC	76	67.3	37	32.7	113	100.0	83	74.1	29	25.9	112	100.0
	SBC	12	70.6	5	29.4	17	100.0	13	76.5	4	23.5	17	100.0
	PTA	26	72.2	10	27.8	36	100.0	34	94.4	2	5.6	36	100.0
	PANCHAYAT	97	57.1	73	42.9	170	100.0	151	88.8	19	11.2	170	100.0
	PARENTS	225	71.4	90	28.6	315	100.0	263	83.5	52	16.5	315	100.0
	Total	**436**	**67.0**	**215**	**33.0**	**651**	**100.0**	**544**	**83.7**	**106**	**16.3**	**650**	**100.0**
Karnataka	VEC	83	59.3	57	40.7	140	100.0	97	69.8	42	30.2	139	100.0
	SBC	145	60.7	94	39.3	239	100.0	153	64.3	85	35.7	238	100.0
	PTA	4	66.7	2	33.3	6	100.0	5	83.3	1	16.7	6	100.0
	PANCHAYAT	199	69.1	89	30.9	288	100.0	158	55.4	127	44.6	285	100.0
	PARENTS	228	67.3	111	32.7	339	100.0	162	47.6	178	52.4	340	100.0
	Total	**659**	**65.1**	**353**	**34.9**	**1012**	**100.0**	**575**	**57.0**	**433**	**43.0**	**1008**	**100.0**
Kerala	VEC	107	42.8	143	57.2	250	100.0	177	70.8	73	29.2	250	100.0
	SBC	8	47.1	9	52.9	17	100.0	12	70.6	5	29.4	17	100.0
	PTA	5	38.5	8	61.5	13	100.0	6	46.2	7	53.8	13	100.0
	PANCHAYAT	143	38.1	232	61.9	375	100.0	157	41.9	218	58.1	375	100.0
	PARENTS	82	39.8	124	60.2	206	100.0	88	42.7	118	57.3	206	100.0
	Total	**345**	**40.1**	**516**	**59.9**	**861**	**100.0**	**440**	**51.1**	**421**	**48.9**	**861**	**100.0**
Madhya Pradesh	VEC	252	54.7	209	45.3	461	100.0	366	79.4	95	20.6	461	100.0
	SBC	92	60.9	59	39.1	151	100.0	126	83.4	25	16.6	151	100.0
	PTA	59	58.4	42	41.6	101	100.0	81	79.4	21	20.6	102	100.0
	PANCHAYAT	225	53.4	196	46.6	421	100.0	319	76.3	99	23.7	418	100.0
	PARENTS	287	61.1	183	38.9	470	100.0	322	68.2	150	31.8	472	100.0

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
	Total	**915**	**57.0**	**689**	**43.0**	**1604**	**100.0**	**1214**	**75.7**	**390**	**24.3**	**1604**	**100.0**
Maharashtra	VEC	264	83.8	51	16.2	315	100.0	296	92.8	23	7.2	319	100.0
	SBC	35	87.5	5	12.5	40	100.0	35	85.4	6	14.6	41	100.0
	PTA	49	81.7	11	18.3	60	100.0	44	75.9	14	24.1	58	100.0
	PANCHAYAT	258	86.9	39	13.1	297	100.0	270	88.8	34	11.2	304	100.0
	PARENTS	287	84.2	54	15.8	341	100.0	257	81.8	57	18.2	314	100.0
	Total	**893**	**84.8**	**160**	**15.2**	**1053**	**100.0**	**902**	**87.1**	**134**	**12.9**	**1036**	**100.0**
Manipur	VEC	23	59.0	16	41.0	39	100.0	34	87.2	5	12.8	39	100.0
	SBC	21	16.2	109	83.8	130	100.0	71	54.6	59	45.4	130	100.0
	PTA	7	36.8	12	63.2	19	100.0	18	94.7	1	5.3	19	100.0
	PANCHAYAT	1	10.0	9	90.0	10	100.0	5	50.0	5	50.0	10	100.0
	PARENTS	1	100.0	0	0.0	1	100.0	0	0.0	1	100.0	1	100.0
	Total	**53**	**26.6**	**146**	**73.4**	**199**	**100.0**	**128**	**64.3**	**71**	**35.7**	**199**	**100.0**
Meghalaya	VEC	67	60.9	43	39.1	110	100.0	95	86.4	15	13.6	110	100.0
	SBC	11	22.0	39	78.0	50	100.0	48	96.0	2	4.0	50	100.0
	PTA	10	71.4	4	28.6	14	100.0	14	100.0	0	0.0	14	100.0
	PANCHAYAT	0	0.0	6	100.0	6	100.0	5	83.3	1	16.7	6	100.0
	PARENTS	7	70.0	3	30.0	10	100.0	7	70.0	3	30.0	10	100.0
	Total	**95**	**50.0**	**95**	**50.0**	**190**	**100.0**	**169**	**88.9**	**21**	**11.1**	**190**	**100.0**
Mizoram	VEC	2	66.7	1	33.3	3	100.0	2	66.7	1	33.3	3	100.0
	SBC	12	42.9	16	57.1	28	100.0	12	46.2	14	53.8	26	100.0
	PTA	4	30.8	9	69.2	13	100.0	9	69.2	4	30.8	13	100.0
	PANCHAYAT	40	46.0	47	54.0	87	100.0	47	55.3	38	44.7	85	100.0
	PARENTS	37	51.4	35	48.6	72	100.0	48	67.6	23	32.4	71	100.0
	Total	**95**	**46.8**	**108**	**53.2**	**203**	**100.0**	**118**	**59.6**	**80**	**40.4**	**198**	**100.0**
Nagaland	VEC	58	45.3	70	54.7	128	100.0	100	78.1	28	21.9	128	100.0
	SBC	0	0.0.	2	100.0	2	100.0	1	50.0	1	50.0	2	100.0

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
	PTA	0	0.0	5	100.0	5	100.0	3	60.0	2	40.0	5	100.0
	PANCHAYAT	4	30.8	9	69.2	13	100.0	6	46.2	7	53.8	13	100.0
	PARENTS	3	21.4	11	78.6	14	100.0	9	64.3	5	35.7	14	100.0
	Total	**65**	**40.1**	**97**	**59.9**	**162**	**100.0**	**119**	**73.5**	**43**	**26.5**	**162**	**100.0**
Orissa	VEC	41	63.1	24	36.9	65	100.0	32	50.0	32	50.0	64	100.0
	SBC	8	53.3	7	46.7	15	100.0	10	66.7	5	33.3	15	100.0
	PTA	236	64.7	129	35.3	365	100.0	222	61.2	141	38.8	363	100.0
	PANCHAYAT	162	60.4	106	39.6	268	100.0	141	53.0	125	47.0	266	100.0
	PARENTS	174	64.7	95	35.3	269	100.0	141	52.0	130	48.0	271	100.0
	Total	**621**	**63.2**	**361**	**36.8**	**982**	**100.0**	**546**	**55.8**	**433**	**44.2**	**979**	**100.0**
Punjab	VEC	109	72.7	41	27.3	150	100.0	107	71.3	43	28.7	150	100.0
	SBC	2	100.0	0	0.0	2	100.0	2	100.0	0	0.0	2	100.0
	PTA	3	100.0	0	0.0	3	100.0	1	33.3	2	66.7	3	100.0
	PANCHAYAT	133	67.2	65	32.8	198	100.0	126	64.0	71	36.0	197	100.0
	PARENTS	109	68.6	50	31.4	159	100.0	104	65.0	56	35.0	160	100.0
	Total	**356**	**69.5**	**156**	**30.5**	**512**	**100.0**	**340**	**66.4**	**172**	**33.6**	**512**	**100.0**
Rajasthan	VEC	87	39.0	136	61.0	223	100.0	178	79.8	45	20.2	223	100.0
	SBC	18	58.1	13	41.9	31	100.0	22	71.0	9	29.0	31	100.0
	PTA	25	37.3	42	62.7	67	100.0	54	80.6	13	19.4	67	100.0
	PANCHAYAT	85	37.0	145	63.0	230	100.0	151	65.7	79	34.3	230	100.0
	PARENTS	213	44.5	266	55.5	479	100.0	233	48.6	246	51.4	479	100.0
	Total	**428**	**41.6**	**602**	**58.4**	**1030**	**100.0**	**638**	**61.9**	**392**	**38.1**	**1030**	**100.0**
Sikkim	VEC	21	95.5	1	4.5	22	100.0	19	86.4	3	13.6	22	100.0
	SBC	14	28.0	36	72.0	50	100.0	37	74.0	13	26.0	50	100.0
	PTA												
	PANCHAYAT	18	39.1	28	60.9	46	100.0	30	65.2	16	34.8	46	100.0
	PARENTS	21	34.4	40	65.6	61	100.0	42	68.9	19	31.1	61	100.0

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
	Total	**74**	**41.3**	**105**	**58.7**	**179**	**100.0**	**128**	**71.5**	**51**	**28.5**	**179**	**100.0**
Tamil Nadu	VEC	266	65.5	140	34.5	406	100.0	299	73.3	109	26.7	408	100.0
	SBC	18	81.8	4	18.2	22	100.0	19	86.4	3	13.6	22	100.0
	PTA	15	57.7	11	42.3	26	100.0	21	77.8	6	22.2	27	100.0
	PANCHAYAT	249	66.8	124	33.2	373	100.0	277	74.3	96	25.7	373	100.0
	PARENTS	300	72.8	112	27.2	412	100.0	296	70.8	122	29.2	418	100.0
	Total	**848**	**68.4**	**391**	**31.6**	**1239**	**100.0**	**912**	**73.1**	**336**	**26.9**	**1248**	**100.0**
Tripura	VEC	0	0.0	2	100.0	2	100.0	1	50.0	1	50.0	2	100.0
	SBC	88	63.3	51	36.7	139	100.0	123	89.1	15	10.9	138	100.0
	PTA	9	81.8	2	18.2	11	100.0	10	90.9	1	9.1	11	100.0
	PANCHAYAT	19	41.3	27	58.7	46	100.0	34	73.9	12	26.1	46	100.0
	PARENTS	27	55.1	22	44.9	49	100.0	38	77.6	11	22.4	49	100.0
	Total	**143**	**57.9**	**104**	**42.1**	**247**	**100.0**	**206**	**83.7**	**40**	**16.3**	**246**	**100.0**
Uttar Pradesh	VEC	56	11.5	430	88.5	486	100.0	375	77.0	112	23.0	487	100.0
	SBC	1	20.0	4	80.0	5	100.0	4	80.0	1	20.0	5	100.0
	PTA	2	11.1	16	88.9	18	100.0	10	55.6	8	44.4	18	100.0
	PANCHAYAT	60	11.1	482	88.9	542	100.0	421	77.2	124	22.8	545	100.0
	PARENTS	104	17.5	489	82.5	593	100.0	394	66.3	200	33.7	594	100.0
	Total	**223**	**13.6**	**1421**	**86.4**	**1644**	**100.0**	**1204**	**73.0**	**445**	**27.0**	**1649**	**100.0**
West Bengal	VEC	74	98.7	1	1.3	75	100.0	72	96.0	3	4.0	75	100.0
	SBC	247	96.1	10	3.9	257	100.0	232	90.3	25	9.7	257	100.0
	PTA	58	89.2	7	10.8	65	100.0	53	81.5	12	18.5	65	100.0
	PANCHAYAT	372	91.0	37	9.0	409	100.0	333	81.4	76	18.6	409	100.0
	PARENTS	329	85.2	57	14.8	386	100.0	297	76.5	91	23.5	388	100.0
	Total	**1080**	**90.6**	**112**	**9.4**	**1192**	**100.0**	**987**	**82.7**	**207**	**17.3**	**1194**	**100.0**
Andaman & Nicobar	VEC	47	55.3	38	44.7	85	100.0	52	61.2	33	38.8	85	100.0
	SBC	3	75.0	1	25.0	4	100.0	2	50.0	2	50.0	4	100.0

State		School Functions						Enrolment Campaigns					
		Yes		No		Total		Yes		No		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
	PTA	4	66.7	2	33.3	6	100.0	3	50.0	3	50.0	6	100.0
	PANCHAYAT	57	64.0	32	36.0	89	100.0	50	56.2	39	43.8	89	100.0
	PARENTS	51	60.7	33	39.3	84	100.0	30	33.7	59	66.3	89	100.0
	Total	**162**	**60.4**	**106**	**39.6**	**268**	**100.0**	**137**	**50.2**	**136**	**49.8**	**273**	**100.0**
Delhi	VEC												
	SBC	0	0.0	5	100.0	5	100.0	3	60.0	2	40.0	5	100.0
	PTA	14	14.0	86	86.0	100	100.0	74	74.0	26	26.0	100	100.0
	PANCHAYAT	12	16.9	59	83.1	71	100.0	54	74.0	26	26.0	100	100.0
	PARENTS	17	14.9	97	85.1	114	100.0	90	78.3	25	21.7	115	100.0
	Total	**43**	**14.8**	**247**	**85.2**	**290**	**100.0**	**221**	**75.4**	**72**	**24.6**	**293**	**100.0**
Pondicherry	VEC	62	72.1	24	27.9	86	100.0	72	83.7	14	16.3	86	100.0
	SBC	7	100.0	0	0.0	7	100.0	7	100.0	0	0.0	7	100.0
	PTA	7	70.0	3	30.0	10	100.0	8	80.0	2	20.0	10	100.0
	PANCHAYAT	4	57.1	3	42.9	7	100.0	4	57.1	3	42.9	7	100.0
	PARENTS	117	71.3	47	28.7	164	100.0	141	86.0	23	14.0	164	100.0
	Total	**197**	**71.9**	**77**	**28.1**	**274**	**100.0**	**232**	**84.7**	**42**	**15.3**	**274**	**100.0**
All States	VEC	2139	47.4	2376	52.6	4515	100.0	3651	80.8	869	19.2	4520	100.0
	SBC	1001	65.2	535	34.8	1536	100.0	1214	79.2	318	20.8	1532	100.0
	PTA	806	55.1	656	44.9	1462	100.0	1055	72.2	406	27.8	1461	100.0
	PANCHAYAT	2660	50.5	2605	49.5	5265	100.0	3802	72.0	1480	28.0	5282	100.0
	PARENTS	3845	53.7	3312	46.3	7157	100.0	4932	68.7	2249	31.3	7181	100.0
	Total	**10451**	**52.4**	**9484**	**47.6**	**19935**	**100.0**	**14654**	**73.4**	**5322**	**26.6**	**19976**	**100.0**

Table 15

Statewise Percentage of Primry Schools with Two or more Classrooms =A, A+TLMS=B, B+Drinking Water=C, C+Separate Toilets for Girls=D, D+Playground=E

States	Two or More Rooms	A Plus TLMs	B Plus Drinking Water	C Plus Toilets for Girls	D Plus Playground
	A	B	C	D	E
Andhra Pradesh	74.80	50.92	22.31	0.26	0.26
Arunachal Pradesh	89.66	27.59	13.79	0.00	0.00
Assam	38.85	34.91	12.34	0.26	0.26
Bihar	90.70	28.69	9.84	1.79	1.43
Goa	81.44	77.32	54.64	8.25	6.19
Gujarat	77.41	43.65	13.96	1.78	1.78
Haryana	95.83	88.54	63.54	13.02	13.02
Himachal Pradesh	93.26	87.64	58.99	12.92	10.67
Jammu & Kashmir	83.06	78.93	23.55	13.64	13.22
Karnataka	88.52	81.12	40.82	4.59	3.57
Kerala	94.82	90.16	72.02	41.97	32.64
Madhya Pradesh	89.29	47.19	24.50	1.45	0.91
Maharashtra	87.72	84.40	36.83	4.35	3.84
Manipur	88.50	53.5	15.5	1.00	1.00
Meghalaya	66.32	32.63	2.63	1.05	0.53
Mizoram	65.06	22.89	13.25	0.00	0.00
Nagaland	95.06	34.57	8.02	0.62	0.62
Orissa	92.52	75.07	46.54	4.71	1.94
Punjab	96.32	89.48	77.89	24.20	22.10
Rajasthan	98.74	86.11	59.85	20.96	14.90
Sikkim	100.00	69.66	6.74	0.00	0.00
Tamil Nadu	84.49	76.62	52.31	9.72	8.10
Tripura	87.06	81.18	38.46	0.00	0.00
Uttar Pradesh	94.34	69.91	41.77	10.44	9.56
West Bengal	83.42	79.59	34.69	4.59	2.30
Andaman & Nicobar Islands	97.80	92.31	81.32	43.95	21.98
Delhi	100.0	85.57	70.10	41.24	36.08
Pondicherry	87.73	62.26	40.57	25.47	15.09
All States	**85.65%**	**74.38%**	**40.54%**	**9.51%**	**7.45%**

Statewise, percentage of schools with infrastructure facilities as stated in the previous para is the highest in Delhi (36.08%), followed by Kerala (32.64%), Punjab (22.10%), A & N Islands (21.98%), and Pondicherry (15.09%) which are among the top five states on this criterion. States like Andhra Pradesh, Arunachal Pradesh, Assam, Mizoram, Sikkim, Tripura, Meghalaya and Nagaland are among the states which have practically no school meeting the criterion of physical infrastructure. The remaining states' percentage range between 0.91% to 14.90%.

It is to be noted that, among the states with no or less than one percent schools having the basic physical infrastructure as per the OB scheme, the proportion of north-eastern states is the highest, that is, 8:1, with Andhra Pradesh being the only non-north eastern state.

Human Resource (Teacher)

In 1986, the base year for planning the OB inputs, 59.5 per cent primary schools in the country had two or more teachers and the remaining 40.5 per cent had either one teacher or no teacher (Table 16).

Table 16

State-wise Percentage of Schools with Zero, One, Two and more than Two Teachers in 1999 and 1986

State	1999			1993		1986		
	0	*1*	*2 or More*	*0*	*1*	*0*	*1*	*2 or More*
Andhra Pradesh	1.0	18.7	80.3	2.80	33.48	1.37	29.37	63.72
Arunachal Pradesh	0.0	42.3	57.7	0.61	45.46	0.42	55.25	53.9
Assam	0.0	23.9	76.1	0.02	20.89	0.00	34.41	79.1
Bihar	0.0	25.1	74.9	1.91	22.02	1.47	25.89	76.1
Goa	0.0	13.1	86.9	0.00	17.02	0.00	16.82	83.0
Gujarat	0.0	13.0	87.0	0.80	28.81	1.97	37.64	70.4
Haryana	0.0	7.6	92.4	2.53	15.57	0.87	7.88	81.9
Himachal Pradesh	0.5	7.0	92.5	1.03	21.20	0.45	28.26	77.8
Jammu & Kashmir	0.0	15.8	84.2	0.75	35.26	0.47	58.67	64.0
Karnataka	0.3	12.1	87.6	2.08	27.66	0.00	62.33	70.3
Kerala	0.0	0.0	100.0	0.06	0.10	0.00	0.31	89.9
Madhya Pradesh	0.0	10.7	89.3	0.58	30.42	0.20	34.58	69.0
Maharashtra	0.0	17.5	82.5	0.07	18.26	0.51	43.73	81.7
Manipur	2.5	9.0	88.5	0.00	18.97	0.00	18.50	81.0
Meghalaya	0.0	21.0	79.0	0.00	37.13	0.00	53.33	62.9
Mizoram	0.0	15.8	84.2	0.00	15.37	0.00	11.84	84.6
Nagaland	4.3	0.6	89.7	0.00	7.02	0.00	3.71	93.0
Orissa	0.0	7.5	92.5	0.00	16.98	0.59	41.29	83.0
Punjab	0.0	2.0	98.0	0.00	11.52	1.31	11.35	88.5
Rajasthan	0.0	1.3	98.7	0.32	28.62	0.10	54.63	71.1
Sikkim	0.0	0.0	100.0	0.00	1.52	0.00	4.49	98.5
Tamil Nadu	0.0	8.3	91.7	0.00	12.66	0.00	9.31	87.34
Tripura	7.1	5.9	87.0	1.08	7.63	0.05	7.52	91.3
Uttar Pradesh	0.0	20.1	79.9	0.51	9.28	0.19	11.77	90.2
West Bengal	0.0	6.0	94.0	0.17	7.21	0.00	3.46	92.6
Andaman & Nicobar Islands	0.0	2.2	97.8	0.00	11.17	0.00	23.16	88.8
Delhi	0.0	0.0	100.0	0.60	0.45	0.00	0.16	99.0
Pondicherry	1.8	14.0	84.2	0.00	5.67	0.00	22.12	94.3
All States	**0.1**	**15.0**	**84.9**	**0.57** **Two or More 18.30**	**18.13**	**0.50**	**27.96**	**71.5**

The OB inputs in terms of provision of at least two teachers were primarily for 28.5 per cent schools in 1986 and 18.7 in 1993 which did not have at least two teachers to organise teaching-learning environment for four or five classes at primary stage, guiding all round psycho-social-emotional-moral-cultural development of children in the age range of 5 to 10 years or 6 to 11 years, depending on the structure of primary education and age limit for admission to class 1 in respective states. Information regarding age for admission to class 1 and structure of school education in different states is presented in Table 17.

Table 17

Structure of School Education in Different States

States/UT	Age of Admission to Class I	Structure of School Education in India								
		I-V	*I-IV*	*VI-VIII*	*VI-VII*	*V-VII*	*V-VIII*	*IX-X*	*VIII-X*	*XI-XII*
Andhra Pradesh	5	√	-	√	-	-	-	√	-	√
Arunachal Pradesh	6	√	-	√	-	-	-	√	-	-
Assam	6	-	√	-	-	√	-	-	√	√
Bihar	6	√	-	√	-	-	-	√	-	√
Goa	5	-	√	-	-	√	-	-	√	√
Gujarat	5	-	√	-	-	√	-	-	√	√
Haryana	6	√	-	√	-	-	-	-	√	√
Himachal Pradesh	5	√	-	√	-	-	-	√	-	-
Jammu & Kashmir	5	√	-	√	-	-	-	√	-	√
Karnataka	5	-	√	-	-	√	-	-	√	√
Kerala	5	-	√	-	-	√	-	-	√	√
Madhya Pradesh	6	√	-	√	-	-	-	√	-	√
Maharashtra	5	-	√	-	-	√	-	-	√	√
Manipur	5	√	-	√	-	-	-	√	-	√
Meghalaya	6	-	√	-	-	√	-	-	√	√
Mizoram	6	-	√	-	-	√	-	-	√	√
Nagaland	6	-	√	-	-	-	√	√	-	√
Orissa	5	√	-	-	√	-	-	-	√	√
Punjab	5	√	-	√	-	-	-	√	-	√
Rajasthan	6	√	-	√	-	-	-	√	-	√
Sikkim	5	√	-	√	-	-	-	√	-	√
Tamil Nadu	5	√	-	√	-	-	-	√	-	√
Tripura	6	√	-	√	-	-	-	√	-	√
Uttar Pradesh	5	√	-	√	-	-	-	√	-	√
West Bengal	5	-	√	-	-	-	√	√	-	√
Andaman & Nicobar Islands	6	√	-	√	-	-	-	√	-	√
Delhi	5	√	-	√	-	-	-	√	-	√
Pondicherry	5	√	-	√	-	-	-	√	-	√

Progress made in increasing the number of schools with two or more teachers and decreasing the number of schools with one or no teacher is presented in Table 16.

As may be observed from the last row of Table 16, number of zero-teacher schools, which was 10.5 per cent in 1986, came down to 0.8 per cent in 1999. Similarly, single-teacher schools percentage has also been reduced from 30.0 per cent in 1986 to 13.6 per cent in 1999.

Statewise figures, however, are not that encouraging in respect of Assam, where percentage of single-teacher schools continues to be 60.4 in 1999, although it has come down from 70.5 in 1986. In states like Meghalaya and Mizoram every third school is a single-teacher school even in 1999. Among the states which continue to have zero-teacher primary schools in 1999, Tripura leads with 7.1 per cent schools, followed by Nagaland (4.3), Tamil Nadu (3.7), Pondicherry (2.8), Manipur (2.5), Arunachal Pradesh (2.3), and Uttar Pradesh (2.1).

Region wise sanctioned strength of teachers, number of teachers on pay roll and number of teachers present on the day-of-visit of OB Survey team of investigators in 1999-2000, in respect of selected states, is presented in Table 18.

Table 18

Statewise Average Number of Teachers Sanctioned, on Pay Roll and Present on the Day of OB Survey Study Team visit in Selected States in Different Regions

State	Average No. of Teachers Sanctioned	Average No. of Teachers on Pay Roll	Average No. of Teachers Interviewed on Survey Day
Northern Region			
Haryana	3.5	3.2	2.3
Himachal Pradesh	4.2	3.8	2.5
Jammu & Kashmir	2.8	2.4	1.2
Punjab	5.5	5.1	2.4
Uttar Pradesh	3.8	2.5	1.8
Southern Region			
Andhra Pradesh	2.8	2.5	2.5
Karnataka	2.9	2.8	1.9
Kerala	4.9	4.8	1.8
Tamil Nadu	3.3	3.1	0.8

State	Average No. of Teachers Sanctioned	Average No. of Teachers on Pay Roll	Average No. of Teachers Interviewed on Survey Day
Eastern Region			
Bihar	2.6	2.1	1.7
West Bengal	3.5	2.9	2.6
Western Region			
Goa	2.6	2.5	1.9
Gujarat	3.0	2.7	1.0
Maharashtra	3.1	2.8	1.0
North-Eastern Region			
Arunachal Pradesh	2.6	2.2	1.6
Assam	2.6	2.4	2.0
Mizoram	2.9	2.8	1.2
Union Territory			
Delhi	10.0	9.3	3.6
Pondicherry	5.8	4.9	1.1
All States	**3.4**	**3.0**	**1.8**

The Table suggests that a little ever 50 per cent of teachers on pay-roll present themselves in school, on an average. Statewise, noticeable variations in number of teachers on pay-roll and interviewed on the day-of-the-survey may be seen in Delhi, Kerala, Punjab, Gujarat, Maharashtra and Goa, where interviewed teachers' percentage vary from 38.70 per cent (Delhi) to 47.05 per cent (Punjab). The only state in which one hundred percent teachers were interviewed on the day-of-the-survey is Andhra Pradesh.

To find out the level of awareness of teachers about the OB scheme, teachers were asked to expand the abbreviation O.B. Table 19 presents the findings in this context.

Table 19

Statewise Percentage of Teachers who Correctly Expanded O.B. Abbreviation in OB Survey Study

State	**Expanded Correctly**					
	Male		**Female**		**Total**	
	N	**%**	**N**	**%**	**N**	**%**
Andhra Pradesh	165	83.8	33	76.7	198	82.5
Arunachal Pradesh	51	50.0	10	33.3	61	46.2
Assam	38	6.7	12	5.4	50	6.3
Bihar	202	27.3	46	20.5	248	25.7
Goa	53	77.9	90	83.3	143	81.3
Gujarat	95	45.9	12	25.5	107	42.1
Haryana	92	42.4	50	45.9	142	43.6
Himachal Pradesh	76	35.3	54	25.8	130	30.7
Jammu & Kashmir	79	44.9	60	52.2	139	47.8
Karnataka	173	34.0	66	27.7	239	32.0
Kerala	99	91.7	227	87.6	326	88.8
Maharashtra	215	71.9	41	71.9	256	71.9
Mizoram	22	36.1	7	31.8	29	34.9
Punjab	72	36.5	78	30.0	150	32.8
Tamil Nadu	151	56.3	37	46.3	188	54.0
Uttar Pradesh	223	33.0	94	32.8	317	33.0
West Bengal	423	48.4	43	27.7	466	45.3
Delhi	95	56.5	83	44.1	178	50.0
Pondicherry	43	53.8	12	37.5	55	49.1
All States	**2367**	**41.3**	**1055**	**39.3**	**3422**	**40.7**
Total No. of Teachers who were asked the Question	**5725**		**2687**		**8412**	

The Table indicates that at all India level 40.7 per cent teachers were able to expand the O.B. abbreviation correctly. Difference between male and female teachers was marginal as 41.3 per cent male teachers could expand the abbreviation correctly, compared to 39.3 per cent female teachers. Teachers of Kerala (88.8%), Andhra Pradesh (82.5%), Goa (81.3%), and

Maharashtra (71.9%) were more aware of the OB expansion than that of Assam (6.3%), Bihar (25.7%), and Karnataka (32.0%).

As mentioned in chapter on Introduction, the OB scheme had three major components, namely provision of additional rooms, teachers, and teaching-learning-materials. Teachers were enquired about these key-components of the scheme. Findings are presented in Table 20.

Table 20

Statewise Percentage of Teachers who Named Correctly All Components of OB Scheme

State	Correctly Named All OB Components					
	Male		Female		Total	
	N	%	N	%	N	%
Andhra Pradesh	71	36.8	16	37.2	87	36.9
Arunachal Pradesh	19	20.4	1	3.6	20	16.5
Assam	26	4.6	4	1.8	30	3.8
Bihar	19	2.6	5	2.2	24	2.5
Goa	25	36.8	42	40.0	67	38.7
Gujarat	19	9.2	2	4.3	21	8.3
Haryana	30	13.9	16	14.7	46	14.2
Himachal Pradesh	41	19.4	25	12.1	66	15.8
Jammu & Kashmir	50	28.4	27	23.7	77	26.6
Karnataka	45	8.8	18	7.6	63	8.4
Kerala	16	14.8	20	7.7	36	9.8
Maharashtra	72	24.2	19	33.3	91	25.7
Mizoram	1	2.2	1	7.1	2	3.4
Punjab	31	15.9	30	11.9	61	13.6
Tamil Nadu	110	41.4	33	41.8	143	41.4
Uttar Pradesh	42	6.3	14	4.9	56	5.9
West Bengal	58	6.7	6	3.9	64	6.2
Delhi	34	20.2	33	17.4	67	18.7
Pondicherry	37	46.8	13	40.6	50	45.0
All States	**746**	**13.2**	**325**	**12.2**	**1071**	**12.9**

State	Correctly Named All OB Components					
	Male		Female		Total	
	N	%	N	%	N	%
Total No. of Teachers who were asked the Question	**5670**		**2662**		**8332**	

The Table indicates that 12.9 per cent of teachers at all India level could answer all three components correctly. Pondicherry teachers were better informed with 45.0 per cent who named all the components correctly, followed by Tamil Nadu (41.4%), Goa (38.7%), and Andhra Pradesh (36.9%). These figures are pointers towards lack of awareness on the part of teachers about various OB inputs for providing better facilities or, the memory loss of what they might have learnt in the OB training. Some details of Special Orientation of Primary School Teachers (SOPT) programme are given in chapter on Teacher Training. Separate study report is also available for perusal.

State of Utilization of Funds on TLMs

The central government had provided 100 per cent financial assistance for purchase of TLMs. Table 21 shows yearwise release of funds and the extent of their utilization for each state. Substantial funds remained unutilised, especially in the latter part of nineties.

Table 21

Instalment wise Release of Funds for TLMs

State	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998- % Unspent 99
Andhra Pradesh	R F	R F	R P		R U		R U	R U			R U	71
Arunacha Pradesh	R F	R F					R P		R F		R F	3
Assam	R F		R F			R P			R U	R U	R U	53
Bihar	RP	RU				RU	RU				RU	90
Delhi	RF		RF	RF					RF		RP	22
Goa		R F	R F	R F					R F			R P 3
Gujarat	R F		R F			R F	R F	R F	R F		R U	R U 57
Haryana	R F	R F	R F		R F						R U	R U 48
Himachal Pradesh	R F	R F	R F						R F		R P	R U 12
Jammu & Kashmir	RF	RF			RF			RP	RU			22
Karnataka	R F	R F	R F		R F		R F	R P			R U	R U 49
Kerala	R F	R F		R F	R F				R F		R U	18
Madhya Pradesh	R P	R P		R F		R P					R U	64
Manipur		R F	R F		R F	R F					R U	44
Maharashtra	R F		R F		R F	R F	R F	R F	R F	R F		R U 25

State	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	% Unspent
Meghalaya	R F						R F		R F				00
Mizoram	R F	R F			R F			R F			R F	R U	60
Nagaland	R F	R F	R F					R F					00
Orissa	R F	R F	R F	R F		R P					R U	R U	68
Punjab	R F	R F	R F	R F	R F			R F			R P		.01
Rajasthan	R F	R F		R F			R F	R F			R P		8
Sikkim	R F											R U	55
Tamil Nadu	R F	R F	R P				R U	R U					22
Tripura	R F		R F		R F		R F		R F		R P		7
Uttar Pradesh	RF	RF	RF			RF		RF			RF	RU	43
WestBengal		R F		R F	R F	R F	R P				R U	R U	34
A & N Islands			R F								R U		71
Pondicherry		R F						R F	R F		R F	R P	.67

R F=Released Funds Fully Utilised

R P=Released Funds Partially Utilised

R U=Released Funds Not Utilised`at all

%U= Per cent Unutilised Funds

School Supervision

Supervisory practices followed by different states vary considerably from state to state. Some information on this and related issues is presented in Table 22.

The Table indicates that in states like Maharashtra, Tamil Nadu, Pondicherry, Punjab, Orissa, Nagaland, Mizoram, Haryana, Delhi and Tripura, supervision of schools is conducted by the Block Education Officer in more than 70% of schools. On the other hand, in states like Sikkim, the supervision is done by the District Education Officer.

Regarding frequency of supervision, Table 22 reveals that in large number of states the supervision of schools' functioning is rather irregular, and rarely related to OB.

Table 22

State-wise Supervisory Authority, Frequency of Supervision and Whether Supervision is OB-Related

(in Percentages)

State	N	Supervisory Authority				Frequency of Supervision					OB Related Supervision
						Regularly			Irregularly		
		BEO	DEO	Both	Not Aware	Once a Year	Once in 2/3 Years	Once in 5 Years	Irregular	Not Aware	
		%	%	%	%	%	%	%	%	%	%
Haryana	199	73.4	0.5	26.1		86.8	6.1	0.0	7.1		34.1
Himachal Pradesh	197	62.4	3.6	34.0		64.5	22.3	5.6	7.6		3.7
Jammu & Kashmir	242	60.7	15.7	23.6		41.1	18.3	0.0	40.7		12.4
Madhya Pradesh	581	56.5	6.0	37.3		51.6	14.6	1.9	31.8		4.0
Maharashtra	396	91.4	1.8	6.8		68.4	12.4	0.5	18.7		17.4
Manipur	200	23.5	42.5	27.0	7.0	30.0	10.0	10.0	43.5	6.5	21.0
Meghalaya	190	33.7	12.6	17.9	35.8	31.6	2.6	2.6	53.2	10.0	5.3
Mizoram	81	72.8	24.7	2.5		25.6	12.2	6.1	56.1		7.5
Nagaland	162	84.0	3.7	12.3		30.2	7.4	0.6	56.8	4.9	6.2
Orissa	363	87.6	12.4	0.0		37.1	16.3	2.2	44.3		15.7
Punjab	189	86.8	12.7	0.0	0.5	34.0	16.2	7.1	41.6	1.0	10.9
Rajasthan	396	58.3	7.8	22.7		58.3	21.2	3.0	5.8	11.6	3.5
Sikkim	89	6.7	93.3	0.0		47.2	9.0	1.1	42.7		14.6
Tamil Nadu	432	96.3	3.7	0.0		62.3	4.9	0.9	31.5	0.5	22.0
Tripura	84	79.8	20.2	0.0		19.0	4.8	11.9	64.3		19.0
Uttar Pradesh	577	51.0	8.5	40.6		61.7	16.5	6.8	15.1		11.1
Andaman & Nicobar	86	58.1	41.9	0.0		64.4	3.4	0.0	32.2		9.3
Delhi	100	78.0	3.0	19.0		79.0	11.0	3.0	7.0		3.0
Pondicherry	106	93.4	5.7	0.0	0.9	44.3	2.8	0.0	51.9	0.9	13.2

Enrollment in Schools

Although enrollment was not be an issue to be investigated in the study, to have an idea whether school enrollment has gone up or come down or remained where it was in 1993, information was collected and classified. Table 23 provides figures on school enrollment sexwise and classwise in 1993 and 1998.

All states row, at the base of the table, shows that out of an average of 24.1 students who enrolled in class 1 in 1993, 12.1 students reached class 5 in 1998 or 19.1 in class 4 in 1998, if detained students or freshly enrolled students in-between classes are not taken into account. Statewise figures show wide variations. Practically all states show increase in enrollment within a class between 1993 and 1998 in varying degrees, and higher increase in the case of girls, compared to boys. The cohort analysis shows slight increase in enrollment, from class 1 or 2 to class 5 in states like A & N Islands and Pondicherry. Generally, however, there is a decrease in class enrollment over the years, though the degree of decrease vary from state to state. Only in states like Assam, Bihar and Madhya Pradesh, there appears to be "no loss" on class enrollment from 1993 to 1998.

State wise school enrollment of boys, girls and total for 1993, 1998, and 1999 is given in Table 24. Percent attendance is also presented for 1999.

The figures in the Table clearly shows an upward trend, varying in different degrees from state to state, during 1993 and 1998. The highest average school enrollment among the states is in Delhi (354.9), followed by Punjab (210.7), West Bengal (161.5), Kerala (154.3) and Uttar Pradesh (146.3). In the case of states like Kerala, Tamil Nadu and Pondicherry there is a downward tend in school enrollment.

Attendance in school is mostly near or above 80 per cent except in states like Bihar, Haryana, Madhya Pradesh, Mizoram, Rajasthan and West Bengal where it ranges between 60 to 80 per cent Attendance of girls is slightly higher than boys in states like Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, J & K, Kerala, Punjab and A & N Islands.

Table 23

Statewise and Classwise Average Enrollment of Students in a Primary School in 1993 and 1998

State	Class																													
	1						2						3						4						5					
	1993			1998			1993			1998			1993			1998			1993			1998			1993			1998		
	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Andhra Pradesh	10.8	9.7	20.5	20.2	19.3	39.5	6.3	5.5	11.8	11.2	11.2	22.4	5.6	4.5	10.1	9.5	8.9	18.4	4.7	3.5	8.2	7.8	6.7	14.5	4.5	2.9	7.4	6.7	5.6	12.3
A. P.	6.2	5.1	11.4	9.3	7.5	16.8	4.5	3.6	8.2	6.9	5.9	12.8	3.1	2.6	5.7	6.9	5.6	12.5	2.8	1.6	4.4	5.4	4.6	10.0	2.1	1.4	3.5	4.5	3.9	8.4
Assam	12.3	10.3	22.6	18.0	15.4	33 .4	7.5	6.1	13.6	10.9	9.2	20.1	6.5	4.9	11.4	9.2	7.6	16.8	5.0	4.0	9.0	7.2	6.0	13.2	8.6	7.5	16.1	12.1	10.4	22.5
Bihar	17.7	10.3	27.9	24.4	16.4	40.8	11.6	6.2	17.8	17.5	11.3	28.8	9.3	4.9	14.2	14.3	8.9	23.2	7.7	4.0	11.7	11.5	6.8	18.3	6.7	3.5	10.2	9.5	5.5	15.0
Goa	6.4	5.9	12.3	5.8	5.6	11.4	5.3	5.1	10.3	5.7	5.1	10.8	5.1	5.5	10.6	4.9	4.8	9.7	4.6	4.7	9.3	5.1	4.9	10.0						
Gujarat	12.0	10.0	22.0	11.3	10.1	21.4	9.0	7.2	16.2	9.2	8.2	17.4	8.2	6.7	14.9	8.5	7.1	15.6	6.0	4.4	10.4	7.3	5.8	13.1						
Haryana	12.0	9.6	21.5	14.0	13.1	27.1	12.3	10.2	22.5	15.5	14.6	30.1	12.7	9.6	22.3	14.7	13.7	28.4	11.2	9.1	20.3	12.3	11.1	23.4	10.1	7.6	17.7	10.7	10.1	20.8
H. P.	11.1	10.7	21.8	11.0	10.9	21.9	9.2	8.8	18.1	10.2	9.8	20.0	8.9	8.2	17.0	9.0	8.6	17.6	8.4	7.5	15.9	8.7	7.8	16.5	7.8	6.7	14.4	8.3	7.3	15.6
J & K				8.5	5.4	13.9				4.2	3.4	7.6				3.6	3.2	6.8				3.8	3.0	6.8				3.3	3.0	6.3
Karnataka	13.6	12.2	25.7	12.2	11.3	23.5	10.8	9.4	20.2	10.7	10.1	20.8	10.1	8.5	18.6	11.4	10.0	21.4	8.3	6.8	15.2	9.4	8.8	18.2						
Kerala	22.6	21.5	44.2	18.0	17.3	35.3	23.2	22.3	45.6	18.8	18.0	36.9	24.0	23.3	47.3	20.6	19.7	40.3	24.1	23.1	47.2	21.3	20.5	41.8						
Madhya Pradesh	10.2	7.0	17.2	13.3	11.2	24.5	8.3	5.8	14.0	13.1	10.8	23.9	8.2	5.6	13.8	12.0	9.3	21.2	7.5	5.1	12.5	11.1	8.1	19.2	6.7	3.8	10.5	10.7	6.7	17.4
Maharashtra	14.6	12.8	27.4	12.3	10.8	23.1	12.7	11.2	23.9	13.3	11.6	24.9	12.4	10.6	23.0	14.7	13.6	28.4	11.0	9.1	20.1	13.1	11.3	24.4						
Manipur	9.2	9.4	18.5	11.6	12.2	23.8	5.7	5.7	11.5	6.0	6.2	12.2	4.2	3.6	7.8	4.3	4.6	8.9	4.5	4.1	8.6	5.1	4.6	9.7	2.6	2.7	5.3	2.6	2.7	5.3
Meghalaya	6.8	6.8	13.6	8.4	8.4	16.8	4.9	5.1	10.0	5.9	5.9	11.8	4.3	4.5	8.8	5.2	4.8	10.0	2.7	2.9	5.6	3.4	3.6	7.0						
Mizoram	6.5	5.7	12.2	9.8	8.6	18.4	3.9	3.2	7.1	5.5	4.1	9.6	3.7	2.9	6.6	5.1	4.3	9.4	2.9	2.6	5.6	4.1	4.1	8.2						
Nagaland	8.4	7.0	15.4	11.6	9.2	20.8	6.2	5.1	11.3	8.6	7.5	16.1	5.0	4.2	9.2	6.5	7.9	14.4	3.8	3.3	7.1	6.2	5.1	11.3						
Orissa	8.8	7.3	16.1	11.4	9.0	20.4	7.8	6.3	14.1	10.2	8.2	18.4	7.9	6.1	14.0	9.9	8.1	18.0	6.8	4.9	11.7	8.3	6.8	15.1	5.3	4.0	9.3	7.1	5.6	12.7
Punjab	23.9	21.3	45.2	25.5	22.5	48.0	24.1	21.4	45.5	25.3	23.0	48.3	22.2	19.2	41.4	22.2	20.9	43.1	20.2	17.2	37.4	20.0	18.4	38.4	16.5	14.5	30.9	17.1	15.8	32.9
Rajasthan	17.0	8.7	25.7	26.2	18.1	44.3	8.0	3.5	11.5	12.7	7.5	20.2	6.6	2.8	9.4	10.2	5.4	15.7	5.7	2.0	7.8	8.7	4.0	12.7	5.1	1.7	6.9	7.5	3.3	10.8
Sikkim	7.3	6.6	13.9	9.2	8.1	17.3	6.3	5.8	12.1	7.7	7.3	15.0	5.5	4.5	10.0	6.9	6.4	13.3	3.0	2.7	5.7	4.2	4.2	8.4	2.0	1.8	3.8	3.3	3.1	6.4
Tamil Nadu	13.5	12.8	26.3	12.8	12.5	25.3	11.6	11.3	22.9	11.8	11.2	23.0	11.9	11.4	23.3	11.8	11.7	23.5	12.5	11.3	23.8	11.3	10.9	22.2	11.6	10.6	22.2	11.1	10.8	21.9
Tripura	11.7	9.4	21.1	13.3	11.1	24.4	8.9	6.1	15.0	12.6	9.5	22.1	8.1	5.7	13.8	12.0	9.6	21.6	6.2	4.6	10.8	9.7	8.1	17.8	4.3	3.4	7.7	7.4	6.2	13.6
Uttar Pradesh	12.6	7.8	20.4	22.4	17.6	40.0	10.5	6.2	16.7	19.7	15.8	35.5	9.5	5.1	14.6	17.7	13.5	31.2	7.5	4.2	11.7	13.0	9.2	22.3	6.6	3.4	10.1	10.4	7.0	17.4
West Bengal	27.6	23.1	50.7	32.0	28.8	60.8	16.9	14.3	31.2	20.8	18.9	39.7	14.2	11.4	25.6	17.2	15.7	32.9	12.5	9.7	22.2	14.9	12.8	27.8						
A & N Islands	9.1	9.3	18.4	10.8	10.0	20.8	6.7	7.0	13.7	10.5	9.8	20.3	6.7	6.5	13.2	11.1	11.0	22.1	7.1	6.4	13.5	12.1	10.3	22.4	6.2	6.1	12.3	11.0	10.3	21.3
Delhi	18.7	42.5	61.3	23.2	57.0	80.2	16.6	42.0	58.6	23.0	49.4	72.4	16.7	39.6	56.3	22.4	48.0	70.4	17.4	35.9	53.3	21.5	46.0	67.5	15.4	33.1	48.5	19.4	45.0	64.4
Pondicherry	12.7	13.1	25.8	12.1	11.5	23.5	11.5	12.2	23.7	12.3	12.0	24.3	12.5	12.4	25.0	12.3	12.7	24.9	14.1	14.5	28.6	12.1	12.7	24.8	12.4	13.8	26.2	11.9	12.0	23.9
All India	**13.2**	**10.9**	**24.1**	**16.6**	**14.5**	**31.1**	**10.0**	**8.4**	**18.4**	**13.1**	**11.5**	**24.5**	**9.3**	**7.6**	**16.9**	**11.9**	**10.4**	**22.4**	**8.2**	**6.6**	**14.8**	**10.3**	**8.8**	**19.1**	**4.9**	**3.8**	**8.8**	**6.6**	**5.5**	**12.1**

Table 24

Statewise Average School Enrollment in 1993, 1998 and 1999 and Attendance in 1999

State	School Visited	School Enrolment									Attendance 1999			Percent Attendance in 1999		
		1993			*1998*			*1999*								
	N	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Andhra Pradesh	401	32.0	26.0	58.0	55.4	51.6	107.0	56.7	54 .2	111.0	45.2	43.2	88.4	79.9	79 .7	79.6
A. P.	88	18.0	14.3	33.1	33.1	27.5	60.6	35.2	28.9	64.0	32.8	27.9	60.7	93.2	96.5	94.8
Assam	401	39.9	32.9	72.8	57.4	48.8	106.2	66.4	56.7	123.1	53.8	44.8	98.6	81.0	79.0	80.1
Bihar	585	53.0	28.9	81.9	77.3	48.9	126.2	81.5	51.9	133.4	51.3	32.0	83.2	62.9	61.7	62.4
Goa	99	21.3	21.2	42.5	21.5	20.5	42.0	21.6	20.6	42.2	18.8	18.2	37.1	87.0	88.3	87.9
Gujarat	401	35.8	28.6	64.4	37.5	32.1	69.6	39.0	33.6	72.6	29.8	25.4	55.2	76.4	75.6	76.0
Haryana	203	58.2	46.1	104.3	67.3	62.5	129.9	59.1	55.5	114.6	38.6	37.7	76.4	65.3	67.9	66.7
H. P.	200	45.4	41.8	87.2	47.1	44.4	91.5	44.9	43.1	88.0	41.5	40.2	81.7	92.4	93.3	92.8
J & K	249				23.3	17.9	41.2	20.5	20.8	41.3	17.5	18.6	36.0	85.4	89.4	87.2
Karnataka	396	42.7	36.9	79.6	43.8	40.3	84.0	44.4	40.1	84.5	33.1	29.8	62.8	74.5	74.3	74.3
Kerala	216	94.0	90.2	184.2	78.6	75.6	154.3	78.6	75.6	154.3	67.3	65.1	132.3	85.6	86.1	85.7
Madhya Pradesh	599	40.8	27.2	68.0	60.2	46.0	106.2	59.7	45.9	105.6	40.9	30.0	70.9	68.5	65.4	67.1
Maharashtra	401	50.9	43.8	94.6	53.8	47.8	101.6	49.8	43.3	93.1	44.4	38.0	82.5	89.1	87.8	88.6
Manipur	200	26.2	25.5	51.7	29.6	30.3	59.9	33.4	33.0	66.4	27.7	26.6	54.3	82.9	80.6	81.8
Meghalaya	190	18.8	19.3	38.1	22.9	22.8	45.7	21.4	22.3	43.7	17.4	17.8	35.2	81.3	79.8	80.5
Mizoram	87	16.9	14.4	31.4	24.5	21.1	45.6	25.5	21.7	47.2						
Nagaland	162	23.5	19.7	43.2	33.5	30.0	63.5	38.3	32.7	71.0	32.7	27.7	60.3	85.4	84.7	84.9
Orissa	370	36.7	28.6	65.2	46.8	37.8	84.6	48.9	39.3	88.2	48.7	34.3	83.0	99.6	87.3	94.1
Punjab	200	106.9	93.6	200.5	110.1	100.6	210.7	107.3	97.0	204.2	87.8	81.8	169.6	81.8	84.3	83.1
Rajasthan	396	42.4	18.8	61.2	65.4	38.4	103.9	63.2	36.3	99.5	38.6	21.2	59.7	61.1	58.4	60.0
Sikkim	89	24.1	21.4	45.4	31.2	29.1	60.3	35.0	32.1	67.1	29.8	27.0	56.8	85.1	84.1	84.6
Tamil Nadu	432	61.1	57.4	118.5	58.9	57.1	116.0	56.1	54.2	110.3	42.8	41.7	84.5	76.3	76.9	76.6
Tripura	85	39.1	29.2	68.3	55.0	44.5	99.5	54.8	45.0	99.7	45.7	36.2	81.8	83.4	80.4	82.0
Uttar Pradesh	589	46.7	26.6	73.3	83.1	63.2	146.3	84.0	64.4	148.3	64.0	48.4	112.5	76.2	75.2	75.8
West Bengal	402	71.2	58.5	129.7	85.1	76.4	161.5	81.0	73.2	154.2	55.2	48.2	103.3	68.1	65.8	67.1
A & N Islands	92	35.9	35.2	71.1	55.5	51.3	106.8	58.4	53.5	112.0	48.3	44.9	93.3	82.7	83.9	83.3
Delhi	100	84.8	193.2	278.0	109.5	245.4	354.9	88.3	194.5	282.8	72.8	155.4	228.3	82.4	79.9	80.7
Pondicherry	106	63.3	66.0	129.3	60.6	60.9	121.4	60.2	60.6	120.8	46.0	46.4	92.3	76.4	76.6	76.4
All States	**7739**	**45.6**	**37.3**	**83.0**	**58.5**	**50.7**	**109.2**	**56.3**	**48.2**	**104.5**	**44.8**	**38.4**	**83.2**	**79.5**	**79.7**	**79.6**

Statewise change in average enrollment in a school, from 1993 to 1999, for boys and girls separately, indicating relative increase or decrease among boys and girls, as well as direction of change in total school enrollment, is presented in Table 25.

Table 25

Statewise Change in Average Enrolment in a School from 1993 to 1999

(100.0 means no change in enrolment)

State	Boys	Relative Increase (>) Decrease (<) Between B & G	Girls	Total	Direction of Change in Total Enrollment
Andhra Pradesh	177.2	<	208.5	191.4	+
A. P.	195.6	<	202.1	193.4	+
Assam	166.4	<	172.3	169.1	+
Bihar	153.8	<	179.6	162.9	+
Goa	101.4	>	97.2	99.3	-
Gujarat	108.9	<	117.5	112.7	+
Haryana	101.5	<	120.4	109.9	+
H. P.	98.9	<	103.1	100.9	+
J & K					
Karnataka	103.9	<	108.7	106.2	+
Kerala	83.6	<	83.8	83.8	-
Madhya Pradesh	146.3	<	168.7	155.2	+
Maharashtra	97.8	<	98.8	98.4	-
Manipur	127.5	<	129.4	128.4	+
Meghalaya	133.8	<	115.5	114.7	+
Mizoram	150.9	>	150.7	150.3	+
Nagaland	162.9	<	165.9	164.4	+
Orissa	133.2	<	137.4	135.3	+
Punjab	100.4	<	103.6	101.8	+
Rajasthan	149.0	<	193.1	162.6	+
Sikkim	145.2	<	150.0	147.8	+
Tamil Nadu	91.8	<	94.4	93.1	-
Tripura	140.2	<	154.1	145.9	+
Uttar Pradesh	179.9	<	242.1	202.3	+
West Bengal	113.8	<	125.1	118.9	+
A & N Islands	162.7	>	151.9	157.5	+
Delhi	104.1	>	100.7	101.7	+
Pondicherry	95.1	>	91.8	93.4	-
All States	**123.5**	<	**129.2**	**125.9**	+

The Table shows lesser increase in boys in school enrollment than girls, except in states like Mizoram, A & N Islands, Delhi and Pondicherry where boys have an edge over girls. Direction of change in school enrollment is positive in majority of states except Goa, Kerala, Maharashtra, Tamil Nadu and Pondicherry where school enrollment has shown a drop in enrollment.

Learning Achievement

No information was colleted on learning achievement of students in the OB study. However, some of the districts included in the OB study also formed part of DPEP districts in the country. A comparison between base-line assessment of learning achievement of students in mathematics in common districts was compared at two points of time, in 1994 (base-line assessment) and 1987 (mid-term assessment) with that of non-DPEP districts but included in the OB study. Table 26 provides this information.

Table 26

Learning Achievement of Class III/IV Students in Mathematics (Mean Percent)

(in Percent Points)

State	Shukla 1994	BAS Test 1994	Same BAS Test in 1997	New MAS 97	Direction of Difference				Class Tested
	A	B	C	D	B & C	B & D	A & C	A & D	
Assam	46.0	28.08	47.40	58.67	+	+	+	+	III
Haryana	48.5	37.87	42.03	47.12	+	+	-	-	IV
Karnataka	27.5	48.56	27.68	45.39	-	-	+	+	III
Kerala	35.2	35.20	60.0	37.65	+	+	+	+	III
M.P.	32.5	37.20	28.62	29.16	-	-	-	-	IV
Maharashtra	37.7	28.35	36.94	28.68	+	+	-	-	III
Tamil Nadu	41.2	34.97	40.55	41.71	+	+	-	+	IV
					+5, -2	+5, -2	+3, -4	+4, -3	

Figures in the Table reflect directional differences and do not suggest any definite trend.

Implications of Major Findings and Recommendations

Teacher and Classroom Position

If national level averages are to be believed, provision of at least two-classroom, two-teacher and adequate number of blackboards related objectives of the OB scheme appear to have been achieved. According to the national sample survey of implementation of the scheme in primary schools in rural areas, an average of 3.3 classrooms, 3.0 teachers and more than 2 blackboards in good condition in a schools were available in the academic session 1999-2000.

Teacher : However, the averages *do not reflect* ground realities prevailing in many a primary schools in the country in 26 out of 28 states / union territories. At all India level, 13.6 per cent schools continue to remain single-teacher schools and 0.8 per cent with no teacher. The 1986 teacher related situation has, of course, improved considerably. Compared to 30.0 per cent single-teacher and 10.5 per cent no-teacher schools in 1986, these figures have come down to 13.5 per cent and 0.8 per cent in 1999-2000. The reality cannot be wished away that at the state level, 60.4 per cent schools in Andhra Pradesh, one-third of schools in Meghalaya and Mizoram, one-fourth in Andhra Pradesh, almost one-fifth in Goa and Gujarat, and over one-tenth in Jammu and Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu and West Bengal continue to function with one-teacher only. Only Delhi and Sikkim have the distinction of achieving the target of at least two teachers and two classrooms with blackboards in good condition in every school.

Classroom : Classroom position in terms of averages is also misleading as only Delhi and Sikkim (the same states which have at least two teachers) have at least two classrooms in every school; otherwise percentage of single-classroom schools is substantial in Assam (60.4%), Mizoram (34.9%), Meghalaya (33.7%), Andhra Pradesh (25.2%), and Gujarat (22.6%). States which have about or less than 5 per cent single-classroom schools include Haryana (3.6%), Kerala (5.2%), Nagaland (4.3% zero-classroom and 0.6% single-classroom) Punjab (3.7%), Rajasthan (1.3%), Uttar Pradesh (2.1% zero-classroom and 3.5% single-classroom) and A & N Islands (2.2%). In a table form, position of zero and single classroom schools in 1999-2000 is presented in Table 27.

Table 27

Statewise Percentage of Zero and Single-Classroom Schools in 1999-2000

0-5%	6-17%	18-35%	36% and above
Haryana (4.1)	Arunachal Pradesh (10.3)	Andhra Pradesh (25.2)	Assam (70.2)
Kerala (5.2)	Bihar (9.3)	Gujarat (22.6)	
Nagaland (4.9)	Goa (18.6)	Meghalaya (33.7)	
Punjab (3.7)	Himachal Pradesh (6.7)	Mizoram (34.9)	
Rajasthan (1.3)	Jammu & Kashmir (16.9)		
Sikkim (0.0)	Karnataka (11.5)		

0-5%	6-17%	18-35%	36% and above
U.P. (5.6)	Madhya Pradesh. (10.7)		
A & N Islands (2.2)	Maharashtra (12.3)		
Delhi (0.0)	Manipur (11.5)		
	Orissa (7.5)		
	Tamil Nadu (15.5)		
	Tripura (13.0)		
	West Bengal (16.6)		
	Pondicherry (12.2)		

It may be recalled that, in Table 5 on page 25 of this report, maximum number of classrooms available in a given state are mentioned in the last column, which shows the range of available number of classrooms in a state, that varies from 5 to 26. Information revealed by state officials, on condition of anonymity, suggest that in many a cases, once the state proposals or additional classrooms were approved by the concerned authorities, classrooms were not always constructed where they were required; sites of additional classroom construction were decided under local pressures, which often resulted in excessive number of rooms in schools in which they were not required and inadequate number of rooms in schools for which they were formally provided for. *Perhaps corrective steps could be taken in future by the local administration itself, by checking such practices, which result in counter-productive situations.*

Similarly, administrative measures may have to be taken by respective departments in states regarding transfer of teachers to places of their convenience under pressure and to firmly deal with prevailing malpractices in matters related to teachers postings and transfers.

For meeting the requirement of additional teaching force, for which fiscal constraints may not permit fresh recruitments, as an interim measure, ex-servicemen could be approached for their contribution to the noble cause of promoting basic education and a token honorarium with a medal could be given as a public recognition for their services. Disciplined and mature, though retired, defence persons will for better models for children to emulate than low paid "Guru" jees (compared to regular teachers). Appointing para teachers are likely to create more problems than solving emerging situation of shortage of teachers due to enrollment drives and likely increase in population in the near future.

Another possible option could be to make it obligatory for every passing-out graduate in the state, irrespective of academic discipline area, to put in nine months of social service to teach in primary schools. Public opinion may have to be build up first, to convince passing-out graduates and their parents, and also the politicians that such efforts should be supported, rather than opposed as had been done in the recent past when Shri Inder Kumar Gujral, Ex Prime Minister had made such a suggestion to meet the constitutional obligation without "soft-loans" from international funding agencies, making future citizens of the country indebted financially for years to come.

Toilets : Primary schools should provide proper facilities to young children to look after their personal needs under hygienic conditions. Constructing toilets without water facility promotes aversion to use dirty toilets with all sorts of insects hovering around, and causing avoidable ailments. Some practical way may have to be discovered to suit local requirements, socially as well as geographically. It is worth trying practices followed in certain sectors of the country, like Ladakh and in other parts of the country, especially in rural areas, where uria based manuring may be accepted by the village society.

Drinking Water : In many areas of the country traditional practices to purify available water through various layers of concrete, sand etc. are in practice. Such practices may have to be revived and practised till such time that drinkable piped water is made available to everyone in the country side. Areas with heavy rains should be encouraged to resort to rain water harvesting, and primary school will be an ideal place to initiate such practices. Already, in the north-eastern states, and places like Lakshadweep these practices are a part of life-style followed at home and in schools.

TLMs : Provision of teaching aids as one-time investment, without visualizing the maintenance cost of these aids, or lack of hands-on training for using the supplied aids, incurring heavy expenditure, has turned out to be a near wasteful input so far. In this context it is suggested that more practical training, less frequently, may be provided to teachers on how to "catch fish" rather than to provide "one-time fish". Intensive school based training in making teaching-learning-materials, using locally available no-cost or low-cost resources may be demonstrated by other primary teachers who are actually using self-prepared materials rather than drawing trainers for primary teachers from secondary schools, university departments or other such experts who may not have any direct experience of handling primary curriculum.

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Chapter 6

Planning and Implementation of the OB Scheme - Some Policy Implications

Objective

With 20 per cent of the average share of the total assistance received by the states under the centrally sponsored schemes taken together in the last decade, the OB scheme has become widely popular as the central government's most important intervention in the primary school sector. Despite some serious deviations from the prescribed norms for its implementation by state governments, the scheme has acquired disproportionately high visibility. No other central intervention in the field of education has received so much attention in the question hours of the Indian Parliament as the OB scheme. It, therefore, calls for a critical review.

Methodology

This study is essentially based on detailed analyses of (a) the OB scheme document, (b) related circulars issued from time to time, (c) reports of evaluation studies covering specific components like teacher training, (d) the present main evaluation survey in 28 states/union territories and related thematic studies and (e) annual reports of the Department of Education, MHRD, NCERT, DPEP-MIS, Reports of Ed.Cil and research publications related to the scheme. Several key persons were also interacted with who have been associated with the formulation and steering of the scheme at different levels of educational administration and technical support institutes.

Findings

There is a general consensus that the OB scheme happened to be a major initiative to highlight the importance of the then New Policy on Education as an enabling instrument towards achieving the longstanding goal of Education for All. However, there is a wide divergence in the views on the instrumentality of achieving the above goal through the scheme. To many, the objective of improving the quality of teaching and learning in the classroom through the provision of the TLMs constituted the major thrust of the scheme. To others the cost of construction of the additional classroom and the second teacher for single-teacher and single-classroom schools, which jointly account for the three-fourth of the scheme money, constitute the major equity thrust of the scheme

It is to be noted that no serious observer of educational development in India has viewed the scheme as an intervention for improving the efficiency and effectiveness of primary schools in terms of participation of local communities and enrolment of children, their attendance and retention or in terms of the improvement of teaching and learning and development of sustainable institutional capacity

Unlike most other centrally sponsored schemes, the OB scheme laid down detailed procedure to be followed by the state governments for implementation of the different components of the scheme. Standards were set for classroom construction, primary school plant, common teaching and learning aids, sports gear and primary school library. Special Orientation Programme for Primary Teachers (SOPT) was also incorporated to familiarize teachers with the TLMs supplied and their use in the classroom.

Over emphasis on a standardized scheme for school improvement in a country like India, with varied geo-climatic, cultural and socio-economic-political diversities and lack of systematic on-line monitoring of the implementation of various components of the scheme by different wings of the state, without much needed co-ordination between them, appear to account for various observed shortfalls.

An analysis of the achievement figures against the targets set in the different phases of the scheme reveals the following broad picture:

- Except in the case of the funds for the construction of additional classrooms, there has been no shortage of funds for additional teachers and the TLMs. The shortfall in the funds for construction component was essentially due to multi-source funding, delays in the flow of funds under the JRY and cost escalation.

- While the shortfall in the construction of additional classroom varies from state to state, almost all the states, except Leh district in J&K state, have been found to give low priority to the construction of toilets.

- Almost in all the states, an overwhelming majority of the new classrooms have been found to be inappropriate from the point of view of design and inadequate from the point of view of quality of construction.

- Most states have been utilizing OB scheme funds for additional teacher for single teacher schools more to substitute the teachers who could otherwise be appointed under the state budget and not necessarily for strengthening their single-teacher schools.

- Several earlier researches conducted to assess the effect of the supply of NCERT Science Kits the UNICEF assistance and other state projects in 1970s and early 1980s indicated that such supply of uniform packages linked with a particular mode of teaching and learning does not, on its own, induce teachers to adapt them in their regular classroom transaction. In almost all cases, such kits remain either unutilized or grossly underutilized.

Analyses of the State Survey Reports under the present overall OB study reveal an interesting pattern. The states which have been found to be efficient in implementing the on-going state funded primary education development activities, also happened to be the states which have been utilizing the funds provided under OB scheme, in some cases bending the scheme norms.

The positive experiences in the implementation of the scheme by a few of the states may be characterized as :

- Establishment of working inter-departmental arrangements for construction of classrooms under the JRY

- Mobilization of local communities for augmenting resources and management of primary schools

- Effective decentralization of procurement mechanisms in respect of locally available items

- Linking the non-formal education and similar other schemes under an umbrella structure for management of primary schools

- Recruitment of female teachers

Despite some serious limitations in the formulation and implementation of OB scheme, it has generated a climate for the need of evolving a meaningful partnership between the central and state authorities for undertaking a process of joint planning and budgeting for elementary education development programmes. With the increasing recognition of the need for effective decentralization of educational planning and management and greater involvement of local communities, this partnership could be extended to the lower levels of educational administration with focus on reforming the present system and evolving effective local structures and linkages. In this emerging organizational design, (the success experience of the Students' Educational and Cultural Movement of Ladakh, popularly known as SECMOL in the remote and relatively little known region of Ladakh in the country is a living example) the NGOs, local communities and the state Department of Education, and an effective networking between them, should assume a much greater role and responsibility for sustainable educational development.

This chapter provides only the salient features of the study. For details the study report is available separately.

Chapter 7 Financial Management of OB Scheme

The Plan of Action (POA) related to National Policy on Education (NPE) 1986, updated in 1992 has stated that :

> *"enrollment by itself is of little importance if children do not continue beyond one year, many of them not seeing* the *school for more than few days."*

The NPE has also recognised the fact that:

> *"unattractive school environment, unsatisfactory conditions of school buildings and insufficiency of school institutional material function as demotivating factors for children and their parents"*

Thus the policy called for substantial improvements of primary schools and provision of support services. The proposals contained in the POA of the NPE and the new thrust of the Seventh Plan paved the way for the Operation Blackboard (OB) Scheme.

The Union Government has accepted a large quantum of financial responsibility in respect of quality and standards of education at all levels of the educational process throughout the country. The role and responsibility of respective States, however, remain undiminished. Implementation of a scheme like the OB had visualised a partnership between the central and state governments. Although OB is a centrally sponsored scheme, no separate funds were provided under the scheme for construction of school buildings in rural areas. School related construction work was to form part of NREP, RLEGP and other appropriate schemes, including special area development schemes such as Tribal Sub-Plan, Hill Areas Development Programme, Border Area Development Programme etc. Funds for appointment of second teacher in single-teacher schools and for purchase of teaching-learning -materials

(TLMs) were to be provided by the Central Government on hundred percent basis. It was necessary for the State Governments to draw up, and adhere to, a detailed plan for construction of primary school buildings or additional rooms as envisaged in the OB Scheme. The Central assistance was contingent upon the State Governments and /or local bodies and/or the local community.

According to the procedure laid down under the OB Scheme, on the basis of sanctions made by the Empowerment Committee in the respective state, the funds were to be released by the Government of India. For the TLMs, 50% of the requirement for the year were to be sanctioned immediately after the block/municipal area-wise projects were sanctioned by the Empowerment Committee and the remaining amount was to be released when the State Government was able to report the progress of expenditure showing that 75% of the earlier amount had been spent. For the second teacher, 50% of the required funds were to be sanctioned when the State Government had created the post for the second teachers and the Government was able to show the progress of expenditure indicating that 75% of the earlier amount had been utilised.

Objective

Keeping in view the plan of implementing the OB Scheme 1987 within three years, which had to be extended from time to time, it was considered necessary to look into the fund flow mechanism to see whether the slow progress in the implementation of the scheme was due to the procedures followed in releasing the funds by the Government of India and/or management of released funds at the State Government level. The Financial Management of the OB Scheme study analysed this aspect.

Methodology

Considering the prevailing unevenness across the states with regard to the release and utilization of the funds for the scheme as well as overall development and geographical location, seven states were selected for the study. The selected states include Punjab, Rajasthan, Madhya Pradesh, West Bengal, Karnataka, Tamil Nadu and Goa. The following procedure was adopted in the selection of districts, blocks and schools within the selected state:

The states were divided into geographical regions.

Within such regions two districts were selected depending on the SC and ST population and the geographical location of the district.

Within the districts two blocks were selected on the same criteria as was done for the districts.

In each of the selected blocks 10 schools were selected randomly and the following factors were considered for due representation:

Remote location of schools

Schools where new buildings were added under OB scheme

Schools where a second teacher was added under OB scheme

The case study technique was adopted to examine the financial management aspect.

Findings

Only the highlights of findings are stated below. Details are given in a separate report entitled : Financial Management of Operation Blackboard Scheme.

In Goa, on the recommendation of the Empowered Committee which consisted of officials from education and finance ministries and departments but no one from schools, it was decided to construct additional 355 classrooms, to appoint additional 167 teachers and to supply TLMs to 966 schools. As a proportion of 1240 primary schools in existence at that point of time, additional rooms formed around 29%, additional number of teachers accounted for roughly 14% and schools identified for supply of TLMs formed 78%. The study revealed that the number of teachers per school was 3 and number of classrooms 2.6, whereas only 25% of schools reported having different items of TLMs. This lends support to the sanctity of the TLMs needs identified by the state. This may not be so for the first two components as out of 355 rooms sanctioned, 20% of schools declared that they were not in need of additional rooms and there was no single teacher school in Goa. Apparently, it appears that these components should not have been included. This issue calls for a detailed probing.

In Karnataka, the scheme has aimed at providing rooms, teachers and TLMs. A total of Rs. 41,055.86 lakh were released in the state out of which 21.5% were towards construction of rooms, 22.6% for the supply of TLMs and 55.8% for the salary of additional teachers recruited. The greater utilization of funds to the extent of 99% was found with regard to the rooms, followed by teachers salary to the extent of 71% and TLMs supply to the extent of 80%. In respect of construction of rooms, however, it is observed that in the V and VI phases of implementation of the scheme only 74 and 72 per cent of the rooms were constructed compared to 99 percent in the first phase. The rooms constructed vis-à-vis proposed for construction has declined as the scheme has progressed. When one looks at this kind of a situation, it needs to be examined whether the quantum of resources available towards the construction of rooms being constructed are declining over the period of time. The unit cost of construction of a room in Karnataka according to the official estimate was Rs. 60,000 in 1987-88 and it has gone upto Rs. 1,10,000 in 1998-99. It follows from this cost escalation that the actual sanction of the money for each room proposed for construction should be in accordance with the rising cost of construction.

For Madhya Pradesh the Government of India released Rs. 4495.93 lakhs from 1987 to 1993-94 (i.e. till the completion of 4th phase). However the Government of M.P. utilised only Rs. 2729.11 lakhs, leaving unutilised amount of Rs. 1866.82 lakhs. It is observed that the non-utilisation of funds during all phases of the scheme varies between 80% to 100%. Interestingly, against TLMs the non-utilisation was minimum in the early period of the scheme. It increased significantly in the third phase. This seems to be the trend in case of all other components also. With regard to teacher component, normally, percentage of non utilisation is expected to be zero. Unfortunately, even here the funds are not fully utilised, possibly on account of the ban that the state government imposed on all recruitments including the recruitment of teachers.

The main question relating to financial management of OB is perhaps not so much about the amount sanctioned and amount remaining unutilised. The question is whether the state sector alone can handle all the problems of elementary educational facilities and provide adequate financial support on a continuing basis for a long period of time. It is also important to consider whether the physical facilities have any positive linkage with enrolment propensity, attendance propensity and promotion in elementary education. It appears from the available studies that the linkage between the two is not strong enough to justify the philosophy behind the OB scheme.

In Rajasthan, notwithstanding the erratic behaviour both of amount received and spent under the scheme, the average annual growth rates during 1987-88 to 1996-97 of around 40% and 35% respectively are quite impressive. When deflated by SOP deflator, the respective growth rates work out to approximately 25% and 21% on average per annum. These growth rates are above the growth rates of around 8% (current) and 3% (constance) per annum of the expenditure of the OB at the national level

In Tamil Nadu the average percentage share of resources received for the OB was to the extant of 22% which was next to Teacher Education (29%). In comparison to these two schemes, some of the other schemes received lesser amount, e.g. Vocational Education (16%), TLC/PLC (11%), Science Education (16%), CLASS Project (5%). This indicates that the OB scheme has found a better place in the state within the major centraly sponsored scheme.

The amount received by the state for two components of the scheme namely Teachers' salary and TLMs show a wide year to year variation for the period 1987-88 to 1998-99. But the average growth rate for the whole period with regard to the amount received was 5.02 per cent but the amount spent has indicated a negative growth rate of -5.02 on an average. If this is the picture at current prices, the message that emerges at constant prices is much more disheartening. At constant prices the average growth rate of amount received by the state was to the extent of 18.1 per cent while that of the money spent was -32.3 per cent. This shows a phenomenal decline in real terms of the expenditure on OB scheme in the state.

It is observed that the system of multiple-source financing is likely to develop problems regarding availability of resources for the scheme as a whole, particularly with respect to the quantum of funds and the time of their release.

financial support on a continuing basis for a long period of time. It is also important to consider whether the physical facilities have any positive linkage with enrolment, progress (in enrolment) propensity and promotion to, ultimately, retention. It appears from these [illegible] studies that the linkage between the two is not strong enough to justify the philosophy behind the OB scheme.

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Chapter 8

School Building Construction under OB Scheme

Objective

The objective of the study was to survey a representative sample of primary schools constructed under OB scheme, selected from five States, to collect data on building spaces and efficiency, structural and constructional aspects, functional performance, general acceptance, opinion of students and teachers and observations of the survey teams, compilation, analysis and interpretation of data and submission of a detailed report.

In this chapter only highlights of the study are presented. A detailed report is available separately.

Sample

Five states including Andhra Pradesh (A.P.), Haryana, Madhya Pradesh (M.P.), Uttar Pradesh (U.P.) and West Bengal were selected for survey to represent areas having variation in geography and climate. These five states have plains, hilly terrains, areas experiencing heavy to no snow fall and heavy to light rain fall, coastal climate and different seismic zones. Also, there are a variety of construction materials and construction technologies available in these five states.

Methodology

To collect the data, a detailed proforma was prepared in consultation with NIEPA. NIEPA had supplied the list of OB schools in Haryana, M.P., U.P., and West Bengal and list of OB schools in A.P. was collected from the State Educational Authorities. In each State, districts/blocks to be surveyed were selected in such a way that the characteristics of each State like different terrains, materials of construction, construction practices, seismic zones are covered, as far as possible. Only OB schools in the chosen districts/blocks were selected. Survey of schools in Haryana and U.P. were conducted by 6 teams of Scientists and Technicians, posted at Roorkee while the survey in A.P., M.P. and West Bengal was conducted by the staff of Extension Centres of CBRI in the respective States. In A.P., each school had a plaque showing the date of inauguration of the school, whether it was constructed under OB/non-OB scheme etc. In other States, information on whether a school or part if it was constructed under OB/non-OB scheme was decided based on the discussion with the teachers/villagers.

521 primary schools, selected, from the 5 states were surveyed. The criteria for selection of schools in each state was as discussed in earlier paras. The list includes 105 schools from 4 districts of A.P., 83 schools from 2 districts of Haryana, 122 schools from 5 districts of M.P., 118 schools from 4 districts of U.P. and 93 schools from 3 districts of West Bengal.

Findings

The schools are located upto 12 Km. from the main road. The access to almost all the schools were found to be 'Kutcha'. In remote villages in hilly terrain, though the children belonged to the local village or the adjacent one, the teachers, who could not find suitable accommodation in the village, had to trek daily several kilometers to attend the school.

The number of classrooms per school varied from 1 to 5. In case of schools with more than 2 rooms, additional rooms have been constructed under non-OB schemes. Most of the schools had verandah. In a few schools, one room is used as office/teachers room. Except in extreme climates, the classes are held in the verandah or in the open. However, in some cases, two classes are held in the same room, causing disturbance to the students.

In A.P. 65% of the schools surveyed had one classroom plus a verandah while 35% of the schools had one classroom, one office and a verandah. Haryana had bigger schools; 60% of them had 1 to 3 rooms and 40% had 5 or more rooms. In M.P., 8% of schools had one room and verandah, 24% schools had two rooms and verandah and 68% schools had more than 2 rooms. In U.P. 80% of the schools are having two classrooms, an office/principal's room and a verandah. In West Bengal, 31% schools had one class room plus verandah, 30% had two class rooms plus verandah and 39% schools had more than 2 rooms.

The enrolment in the schools surveyed varied from a minimum of 14 in village Kandal of Block Jakhnidhar in District Tehri Garhwal in U.P. to a maximum of 528 in village Panwari of Block Panwari in District Hamirpur in U.P. The maximum, minimum and average enrolment in schools for each district are given in Table 28.

In all the schools surveyed, classes are held with the children sitting on the floor/ground. The minimum space requirement of classrooms with children squatting on the floor is 0.73 sq. m. per student. It was found that 37% schools in A.P., 33% schools in Haryana, 62% schools in M.P., 54% in U.P. and 84% schools in West Bengal, do not satisfy the minimum space requirement. There is a need to construct more classrooms in those schools.

One of the building component requirement of schools in OB scheme is provision of a deep verandah. It was found that in West Bengal 87% schools had width of verandah less than 2.4m. In other states the requirement was not satisfied in 5 to 24% of the schools.

About 10% of the schools did not have the provision for drinking water.

One of the major shortcomings of the schools, revealed by the survey, is gross inadequacy of toilets in them. It was seen that toilet facilities have been provided only in 31% schools in A.P., 23% schools in Haryana, 10% schools in M.P., 29% schools in U.P. and 31% schools in West Bengal.

For adequate natural lighting in classrooms, the minimum area of windows required is 15% of the floor area of the classroom. It was found that in 70% of schools in A.P., 80% schools in Haryana, 23% schools in M.P., 15% schools in U.P. and 50% schools in West Bengal, window openings, to provide natural light, were adequate.

The desirable orientation for school buildings is North-South. Survey revealed that, only 45% schools in A.P., 9% schools in Haryana, 19% schools in M.P., 22% schools in U.P. and 59% schools in West Bengal are having the most desirable orientation.

90% of the schools do not have built in storage space in classrooms to keep books etc. However, there are steel almirahs and wooden/steel boxes in teacher's room to keep teaching/sports goods.

In almost 95% of the schools surveyed in the 5 Sates, visibility of blackboard and audibility at the last row of students are proper. There is no glare at the blackboard.

Locally available materials and construction technologies have been used in the construction of schools in all states. Random rubble/coursed rubble masonry has been used in foundation and plinth and brickwork/R.R. masonry in cement mortar for walls in A.P. All the schools surveyed in the State had Cuddapah stones for flooring and flat RCC roofs and 83% schools had wooden frames and shutters for doors/windows. In Haryana brick work in cement/mud mortar is the prevalent material of construction for foundation, plinth and walls and flooring is of cement concrete. Roofs are made flat with RCC or stone patties and wood is used for joinery. Steel frames for doors and windows are finding way in new constructions. In M.P. the most commonly used materials are brickwork in cement mortar for foundation, plinth and walls, cement concrete for flooring, RCC for flat roofs, country tiles for sloping roofs and wood for joinery. Undreamed pile foundation, developed by CBRI, has been used in areas having expansive soil. Stone patties have been used for roofs, in areas where they are locally available. In U.P. foundation, plinth and walls are constructed mostly in brickwork in cement/mud mortar, except in hilly terrain like Tehri Garhwal, where stones are used. Cement concrete is the common material for flooring and RCC for flat roofs except in Distt. Faizabad where brick paving and RBC roofs are common. Wood, which was used for joinery earlier, is being replaced by steel frames in newer constructions. In West Bengal, the most common material for construction of foundation, plinth and walls, is brickwork in cement mortar, wood for joinery and cement concrete for flooring. Flat RCC roofs and sloping roofs with GI/AC sheets/tiles are used in the State, depending upon the intensity of rainfall in the area.

The structural condition of the buildings in A.P. varies from satisfactory to good. In Haryana, about 79% of schools surveyed are in good condition. However, 3 schools in Yamunanagar Distt. have serious structural distress. Out of the schools inspected in M.P., 16% are in good condition and 72% in satisfactory condition. 50% of schools in Gwalior District are in distressed condition while 13% schools in Indore District had to be abandoned due to severe structural distress. In U.P., except in Nainital District, the structural condition of schools is not good. 55% school buildings in Tehri Garhwal District are in distressed condition, 14% buildings in Hamirpur are in severely distressed condition and in Faizabad 8% school buildings had to the abandoned. In West Bengal only about 50% of the schools are in good condition. Leakages from roof, dampness in wall, dampness rising from ground in buildings located at low lying areas are common problems observed in many of the buildings. Cracks in walls and roofs due to unequal settlement of foundation are serious problems noticed in some of the buildings. Corrosion of reinforcement and spalling of concrete at the ceiling of slabs/beams are signs of major structural distress noticed in some of the buildings.

Bhiwani and Yamunanagar Districts of Haryana, Nainital and Garhwal District of U.P. and Jalpaiguri and Maldah District of West Bengal, fall under seismic zone IV. For buildings to be constructed in high seismic zones, earthquake resistant measures such as provision of RC bands at lintel and plinth level and vertical reinforcement at corners and junctions of walls should have been provided. All the school buildings are structurally deficient in this respect.

Most of the teachers consider the schools to be functionally satisfactory, except for the facility of toilets, drinking water and furniture for teachers. In single teacher schools, requirement of another teacher was put up, as the school has to be closed, when the teacher is on leave or has to go for other duties such as collecting pay, or participation in census work, election, immunization programme etc. Lady teachers were resenting their posting to schools in remote hilly areas, as they have to trek daily several kilometers to attend the school.

Among the schools surveyed most of the OB schools have been constructed during 1990-97.

For proper upkeep, appearance, functional utility and prolonged life, regular maintenance of the buildings is essential. Huge investment made in the building stock, can be retained only if the buildings are maintained properly. Unfortunately in none of the states, where the survey was carried out, system appears to be existing of the maintenance of school buildings.

Chapter 9

Teacher Training Inputs in OB Scheme

Objective

The scheme of 'Operation Blackboard (OB) was one of the significant interventions in giving effect to the achievement of the objectives of the National Policy on Education (NPE) in general and to improve facilities in all primary schools run by Government Local Bodies, Panchayati Raj Institutions and recognized aided institutions in particular. The present thematic study deals specifically with the teacher training component as visualized in the Special Orientation Programme for Primary Teachers (SOPT) and has been undertaken with the expectation of contributing meaningfully to the overall National Evaluation study on the Scheme of 'Operation Blackboard' (OB). The main focus of the study was to find out whether the SOPT achieved better utilisation of teaching-learning equipment supplied under the scheme and whether the same was appropriate to the content and process of primary education. It has also attempted to find answer to whether the training design and academic content under SOPT was in tune with the needs of classroom transaction in the context of the ground realities of our primary schools. The question of understanding whether the "master trainers" who are a part of the cascade model had themselves the desired grounding in primary education and also whether any rigidities in the training design were impediments in producing the desired impact.

In this chapter only highlights of the study are presented. A detailed report is available separately.

Methodology

The approach to the study is largely and essentially based on secondary data provided by the impact studies of the SOPT training on classroom processes undertaken in selected states by the NCERT through its Regional Institutes of Education (RIEs) which covered on a sample basis all the regions of the country. Towards securing more information, the study adopted interaction with selected teachers/teacher educators/educational administrators/investigators of the studies mentioned above and based on the above gaps in visualization and formulation of the scheme were identified with a view to making possible suggestions for future.

Findings

The titles of the studies on which the findings are reported indicate that the focus of the study was to understand the impact of SOPT training on classroom recesses. The outcomes of the studies do have implications for their influence on teachers and their classroom performance. It, however, touches upon a wide range of aspects which defined the SOPT training. For example, the studies indicate how child-centred approach in teaching and activity-based teaching influenced the classroom behaviour of teachers. The extent of use of OB materials in teaching-learning and the impact of remedial instruction and evaluation strategies were a part of the relevant investigators reported. Each one of these aspects have produced impact in certain situation but have failed to show the desired results in alternative situations. The major focus of the SOPT is (i) to provide competencies as envisaged in the MLLs (ii) to develop competencies in the use of OB materials supplied to primary schools under OB scheme and (iii) to encourage teachers to adopt child-centred approach to teaching.

In the training Modules a major concern was to deal with important policy parameters relevant to education in general and primary/elementary education in particular. It spelt out basic concerns of universalizing elementary education, reducing disparities in the education of socially disadvantaged groups and first generation learners, education of the scheduled tribes, special focus on the girl child, the educational concerns of the handicapped. etc. These areas though directly do not help in transacting the classroom curriculum, nonetheless they are vital for ensuring development of a definite and positive mindset of the teacher towards the children of that age. Such an understanding was expected to develop in the teacher necessary understanding of strategies of handling social contexts of education. As reflected in the Study Reports, the modules do serve the objective of creating the desired awareness among the teachers on the vital concerns of education.

An SOPT video package entitled "Use of Educational Television Programmes for Training of Primary Teachers" was also expected to be a part of the package to be used by course directors and resource persons in the training programmes. There is no indication whether such a video package was used in the SOPT and if so with what results. The basic idea was to add to the value of SOPT by incorporating audio-visual inputs into it. After having undergone training for a week on such a package, the teacher was expected to be in a position to develop confidence and competency in dealing with teaching of curricular areas at the primary stage. Although only a few experiences would be gained during the actual training, the modules could be a ready reference with the teacher for carrying on demonstrative activities during curriculum transaction in actual classroom situations.

Regarding OB teaching learning equipment vis-à-vis content and process of primary education, the studies reveal the following. It appears that the Mathematics Kit did not get appropriate time in the brief duration of training under SOPT. The "impact studies" do not point out any meaningful experiences of teachers in the use of various items and difficulties that might have been experienced in communication of mathematical concepts through them. It has also been observed that the Primary Science Kit has been used in the SOPT tainting with a focus on explaining to teachers the use of only a few items, particularly the specific activities which could be conducted using the particular item. In an ideal situation, the kit should have been treated as a basic facility with the teacher to familiarize with the concepts of primary science. Since all the items of the kit were naver a part of the teacher training, what one finds is a large amount of under-utilization of the kits that were provided in the SOPT training programme. Of course, there were other aspects like the fear of breakage of items and consequent responsibilities fixed on the teacher which also resulted in using the kit somewhat hesitatingly nonetheless. It would be appropriate to visualize that even the mere provision of Science Kit as something available in the school was an important teaching-learning resource. It, however, expected a lot of ingenuity and involvement of the primary teacher to use it extensively over a period of five years of primary education. The data on this aspect is not available from the studies. Nowhere in the studies analyzed one finds any reference to the experience of the teachers in working with the Mini Tool Kit, much less to use if for development of certain relevant teaching-learning materials for the primary stage.

No specific information is available from the studies reported about matching the scope of primary curriculum with the utilization of the various items included in the kits. At times, it is difficult to ascertain whether such a thing was at all expected. An alternative interpretation is that the individual items provided in the kit in their own right, can be amenable to their use in carrying out certain activities for developing curiosity in children and thus enable them to get involved with some joyful learning experiences. It is found that teacher's guides on environmental studies which detail a whole lot of activities which can be done by students and teachers, from classes 3 to 5, were a part of the kits and related materials supplied. Their one to one correspondence with primary science curriculum is not borne out.

The academic content of the SOPT training essentially involved around transmission of the modules contained in the self-instructional package which was the foundation of the training design. The areas covered had a wide range to make the teacher aware in understanding the concerns of primary education. In particular, the discussion of MLLs, multi-grade teaching and implications of the education of the girl child were found very significant by the teachers. And the studies revealed that the modules were able to generate the necessary sensitization about he contextual issues of primary education among the teachers. It may be noted that no general design of training, even if attempted, would meet with the contextual realities of our primary schools as the approach to the training design generally followed the cascade model. Because of the limitations inherent in such a design, the magnitude of training loss is substantial. Moreover, the training was basically pre-designed on certain aspects but was not based on the felt needs of the teachers. The training methodology essentially involved one-way communication and not one which would involve teacher's direct participation in the process of learning.

As has been mentioned above, the trainers have been identified in the SOPT model at three levels, for example, Master Trainers who would train key recourse person who , in turn, would train resource persons who, in turn, would carry out actual training of teachers at different levels. At the first level that is, the Master Trainer, it is generally an officer who holds a better position in the Department of Education. Such a person may not necessarily be fully equipped with the actual nuances of primary teaching. Even the cascade model of training could perhaps produce better results if the system was open enough to identify and accept primary teachers with proven merit as master trainers. The principle of hierarchy which dominates the identification of training faculty has not been found conducive to the expected results in the SOPT strategy.

One positive impact of the SOPT experience has been seen in some States which came out with alternative designs of SOPT training within the basic framework prescribed by the scheme of SOPT. It is relevant to mention that such States, particularly, Maharashtra and Gujarat proposed modifications in the design of the nationally formulated programme of SOPT to suit their requirements. This was examined by the NCERT and finding that the modifications proposed by the States would bring the programme closer to their needs and requirements, and feeling convinced that the modifications were definite improvements in the SOPT design, this experimentation in designing modifications was appreciated and encouraged. It may be mentioned that allowing the States to develop a training design instead of prescribing a rigid design has come out as one of the possible directions for effectively implementing such a programme in future. It is expected that the whole training methodology could be one of partnership with the practising teacher, working with the teacher to design appropriate activities, discussing their implications, developing the necessary materials and enabling the teacher to carry such experiences back to their classrooms.

Chapter 10

Study of Science and Mathematics Kits supplied under OB Scheme

Objectives

Science and Mathematics kits constitute an important component of the teaching-learning package provided under the OB Scheme. It was, therefore, decided to take up an assessment of these kits. The specific questions the assessment study was expected to answer were related to:

Usefulness and relevance of the kits for teaching competencies of the primary level in science and mathematics

Issues of teacher preparation to facilitate the use of the kits

System of procurement and supply of the kits to schools, quality control of the kits items, the sufficiency of the kits in relation to the enrollment in schools and efforts made to facilitate their use

Training programmes related to the use of the kits by teachers in teaching and monitoring & supervision to ensure their time required by teachers in using the kits while teaching and whether it is commensurate with the time available for teaching science and mathematics

Possibility of teachers with science and mathematics background to use the kits more comfortably user-friendliness of the kits

Possibility of replacing some of the items of the kits by locally available materials or equipment tat can be made by the teachers themselves

Changes needed in the content of the kits and in the instructional manual, the system of supplying kits to schools and of replenishing the used up and broken items, and the quantity required in schools of different sizes

Methodology

To achieve the stated objectives of the study, the kits and their manuals were examined by by experts and teachers, use of the kits by teachers was observed in real life situations and information was collected from the concerned authorities at the state level on the system of procurement and supply of the kits, quality control exercised and teacher training etc.

The study was conducted on selected primary school teachers in Uttar Pradesh. Details of the methodology are provided in the the report of the study, which is available separately.

Major Findings

Procurement & Supply of Science and Mathematics Kits

In Uttar Pradesh the kits were purchased from private manufacturers by the Store Purchase Department of the Directorate of Industries, following the procedures laid down for the purchase that are made by the government, which involves inviting tenders, approving the prices and selecting the firms for supplying the kits. The kits were supplied to Basic Shiksha Adhikari (BSA) in each district, who in turn made arrangements for their distribution to schools.

It is reported that some efforts were made by the state Department of Education to promote the use of Science Kit through school television programme. The state is one of the six states where the facility for production of educational television programmes was created. About 20 programmes were produced on teaching of science with the help of kits in collaboration with the Central Institute of Educational Technology, NCERT. 4000 television sets were provided to primary schools under the programme. Much impact of the programme was not observed since majority of the schools in rural areas were still without TV sets and had no electricity.

Even where electricity was available, its supply was very irregular, and there was not much viewing of the educational programmes in the schools.

Teachers' Qualifications and Training in the use of Science and Mathematics Kits

The teachers involved in the study were drawn from different urban and rural schools and could be considered as constituting a fairly representative sample of teachers from schools covered under the OB scheme.

Among the sampled teachers of primary schools included in the study, one-third of teachers had studied science and mathematics upto class VIII only. Obviously, these teachers are not academically equipped to teach these subjects in primary classes. In particular, since in Uttar Pradesh girls have the option of not studying mathematics in classes IX and X, and choosing Home Science instead of mathematics, many of them who eventually become teachers, have the knowledge of mathematics only upto class VIII level. Even those with High School (class X) qualification are not adequately qualified to teach science and mathematics. At primary stage, in Uttar Pradesh, science is taught in classes III, IV and V as a part of Environment Studies. There are about 50% teachers with teachers with High School or lower qualification, in these subjects.

As a part of the OB scheme, a massive teacher training input was provided to orient the teachers in the use of Science and Mathematics Kits. In Uttar Pradesh, 1,02,000 teachers were given the Special Orientation Programme for Primary Teachers (SOPT) between 1994/95 and 1997/98, which is a little less than one-third of the total number of primary school teachers in the state.

In the 10-day SOPT programme, to begin with some key resource persons were trained by the staff of Regional Institute of Education, NCERT, Ajmer, who then trained DIET lecturers as resource persons to act as trainers for the training of teachers of their respective districts. It may be noted that in the 10-day training programme, with 6 hours of training per day, the time devoted to the demonstration of Mathematics Kit was 2 hours and to the Science Kit also about 2 hours. It is evident, therefore, that the time devoted for demonstration of the kits was far from adequate in view of the fact that the Science Kit has 88 items and 23 charts and the Mathematics Kit has 7 items. Inadequacy of time was confirmed the teachers who had undergone the SOPT training. They informed that during the training they were shown the items of the kits and the use of these items was either not explained or explained very inadequately. Neither any model lessons were presented by the trainers. The trainers admitted that they could hardly introduce various items of the kits to the teachers in the limited allotted time and it was not possible for them to provide any practice to teachers for developing the skills in the use of kit items.

Teachers Knowledge and Skills in Using the Mathematics Kit

The teachers were found to be familiar with only some of the items provided in the Kit and not in others. Very few teachers claimed to be familiar with Dominoes, Cuisenaire strips and Napier strips. In fact these were the items for the use of which some training was needed but not given. Even those teachers who claimed to be familiar with the Kit items and knowledgeable about their use, did not actually have necessary knowledge and skills to use them properly in practice.

Teachers Knowledge and Skill in Using the Science Kit

Out of the 15 selected items (out of a total of 88 items), most of the teachers were familiar with charts, spring balance, compass, thermometer, pulley and magnifying lens. Less than 40% of the teachers were familiar with electric circuit, Y-shaped plastic tube, multipurpose pump, water wheel and rubber stopper. Incidentally electric circuit is not included in the syllabus of primary classes. Majority of teachers felt that the Kit had too many items and they found it hard to identify and remember every item.

Availability of Science and Mathematics Kits in Schools

Only about 7 schools out of 10 have the Kits available. Since about 75% schools were reported covered under the OB scheme, it can be inferred that only about one-half of the schools had the Kits. The available items of the Kits were either broken or not fit for use, especially due to one time provision of the Kits with no maintenance funds made available, and therefore, not in usable condition.

The main study report has made specific recommendations for improvement of the Science and Mathematics Kits and for promoting their use in teaching which include reviewing the following aspects:

Teacher Training
Instructions about kits in in-service training programmes
Developing the culture of using teaching aids
Monitoring of the use of kits as a part of school inspection and supervision
Needed modifications in the kits
Supply of kits and its items in adequate quantity
Use of locally available materials that can replace some of the kit items
Provision for replacement of broken or used up items
Reference to the items to be made in the textbooks
Prominent display of charts in classrooms
Safe keeping of the Kits in Schools
Easy accessibility of kits for use in classroom teaching

For detailed recommendations the main study report may be referred to.

Chapter 11 Case Studies of Field Realities in Village Primary Schools

The case study approach was adopted to understand field level dynamics within and between the village community and Primary School functionaries and beneficiaries. Eighteen locations in different parts of the country were identified by scholars who were to take up these studies. A course in ethnographic approach to understand the field realities related to community's concern for primary schooling and involvement in the schooling process was organised to sensitize the scholars to the issues to be looked into in the study.

Eighteen case studies are reported separately. Some observations based on these studies are as follows:

Traditional reverence of the village community towards schools in general and teachers in particular is on the decline.

Sending children to a school is perceived by the community as an unproductive exercise.

Teachers prefer to commute long distances rather than residing in the village of their posting.

Commuting teachers spend very little time in teaching.

The generally used teaching method involves writing answers of questions given at the end of lessons in the text books on the blackboard and asking students to copy them and memories.

The school premises is often used by the community, before and after school-hours, for a-social, anti- social or at times, even for unlawful purposes.

Teachers experience problems in managing classes with number of students in the range of 70 to 150 per teacher, especially in grade 1 and 2.

Teachers perceive in-service training inputs as inadequate and theoretical.

There is a marked difference in what a teacher tells in an interview situation and what s/he does in classroom situations in respect of pedagogical principles and practices.

Chapter 12

Main Observations on Formulation and Implementation of the OB Scheme

The OB Scheme implementation review 1999-2000, based on a representative sample of primary schools in rural areas in the country, has brought into a sharper focus the ground realities which have contributed to the existing status of primary education in all 25 states and selected union territories. Information provided in 62 different reports, based on the empirical data as well as the critiques prepared by the experts on certain issues associated with the formulation and implementation of the scheme, may trigger off fresh initiatives to tackle the UEE related problems in the Indian context, keeping in view the existing cultural, socio-economic and geo-climatic diversities.

Emerging from the findings of various investigations undertaken, and briefly referred to in the earlier chapters of this report, the following observations deserve special mention:

1. About one-fourth of rural primary schools in the country, with 1993 as the base, have not been covered under the OB scheme.
2. Implementation of different components of the scheme by different state departments, at different points of time, lacking systematic co-ordination within and between departments, has contributed to diffused and sporadic expected outcomes which vary considerably from state to state, and within a state from region to region, making the otherwise possible achievements almost invisible.
3. A standardized one-time provision of OB package for all the primary schools in the country is another major factor for its very limited contribution to improve essential schooling facilities in real terms
4. Over emphasis on covering larger numbers of primary schools under the scheme diluted the quality of inputs provided for school improvement

5. Absence of regular, planned and concurrent monitoring of implementation of the scheme by the central and the state governments caused serious distortions in the application of laid down norms and procedures.

6. Indiscriminate provision of additional classrooms and teachers under pressure from local groups has caused continuance of single-teacher and single-classroom schools in the country to the tune of almost ten to thirteen per cent.

7. Lack of genuine involvement of local community in seeking support to provide necessary funds for maintaining and owning the school plant has promoted indifference of the community towards school improvement

8. Irregular school inspections and indifference of the local community have promoted lack of seriousness on the part of teachers towards their expected duties and responsibilities.

9. Teaching practices of teachers have contributed to rote learning.

10. The time spent on teaching tasks by teachers who prefer to commute long distances to attend school has declined.

11. Absence of relevance of the school curriculum to local socio-economic-geoclimatic conditions has deprived the local communities from the possible benefits of primary education in their development.

12. Duplication of OB related inputs under a variety of internationally funded programmes or internally floated "new programmes" by modifying existing schemes and change in the priorities of concerned authorities from time to time to suit the expectations of frequently changing higher authorities and local pressures, have made most of the school functionaries and beneficiaries oblivious of the OB scheme inputs and their intended objectives.

13. Over emphasis on in-service teacher training in a wide variety of pedagogical concepts and practices, successfully applied in other countries with relatively smaller groups of students and technology based support services, without adequately experienced trainers who have first hand exposure to prevailing ground realities in rural primary schools in India, has promoted indifference in primary school teachers towards the new training curriculum.

14. Growing suspiciousness of professional groups towards education related agendas of different political groups have resulted in ambivalent perceptions of teachers regarding the new initiates being taken in different parts of the country under the patronage of different educational advisors.

15. OB scheme related achievements, in terms of statistical averages, of availability of teachers, classrooms, teaching learning materials and teacher training inputs, hide much more than what they reveal. All-India averages of availability of 3.3 classrooms per school in 1999 (compared to 2.3 in 1993), 84.9% schools with two or more

number of teachers in 1999 (compared to 71.54% in 1986) and reported provision of basic TLMs in practically every school once upon a time, indeed remarkable in terms of figures, do not reflect the prevailing state of affairs in the primary schools. A single teacher continue to take care of more than 100 students under the shade of a tree in summer or under the sky on a sunny winter day, or at best in the covered verandah as the inside of constructed or earlier available physical infrastructure is not usable.

16. The findings reported in about five dozen investigations probing into the outcomes of the OB scheme, reflected in this report, if taken seriously, have the potential to carry out the much needed remedial measures to correct the distortions in the formulation and implementation of the scheme.

17. Incidentally, an example of partnership between local NGOs, Village Communities and the Department of Education for Improving Government Primary Schools was identified during the course of the OB Study and the same is given in the next chapter for the interested readers to draw their own inferences which may have implications for possible qualitative improvements in public sector primary schools.

Chapter 13

An Example of Evolving a Partnership between NGOs, Local Communities and the Department of Education for Improving Government Schools in Rural Areas

Till recently the pass percentage of Ladakhi students in matriculation examination was about five. Ninety five per cent of students had to come out of the school system as frustrated and disheartened drop-outs after spending ten precious years of their prime time of life in school. In other words, 260 government schools with 1,200 staff, would turn out about 30 to 40 matriculates in a year out of the enrolled number of nearly 20,000 students. Cost wise, the government expenditure incurred on these students works out to be several crores of rupees.

The major factors for such a high failure rate could be the school curriculum which did not take into account the geo-climatic and cultural characteristics of the region, the insensitivity of teachers towards educationally deprived rural students, and the education medium being a mix of non-local languages. The visible outcome of such schooling and curriculum has been the frustrated youth lacking self-confidence and self-esteem, who become subsidy beggars.

The educational scene in Ladakh till late seventies and early eighties, as highlighted above, forced parents to turn to private schools which were set up in many towns and villages in the region, funded by the village community who raised funds through staging dramas, organising lotteries, seeking donations and charging fees up to Rs. 300/- per month. The government schools, incurring expenditure ranging from Rs. 400 to Rs. 1,000 per child per month in different parts of the region also continued to function with very low enrolment, and were looked down upon by the parents as institutions where teachers did not attend school regularly, and even if they did come to school, the style of their teaching was oppressive, degrading and lacking humanism.

As a response to the school system which was perceived by the local people as totally irrelevant and insensitive to the needs of the region, a group of Ladakhi students who had returned to their homeland after graduation from universities in India, felt concerned about the plight of increasing numbers of school drop outs, and decided to dedicate themselves to reforming the education system. They organised themselves under the banner of Students' Educational and Cultural Movement of Ladakh (SECMOL), a Non-Governmental Organisation (NGO) which was registered as a non-profit voluntary organisation of students and youth of Ladakh in 1988.

In the beginning the activities of SECMOL were limited to occasionally organising coaching classes and interactions with village students to help them in their matriculation exams, and to inspire and awaken them to the problems of their homeland through youth training camps. Gradually SECMOL attracted even foreign students as well as professionals in different fields of specialisation as volunteers.

The activities of SECMOL were gradually extended to include regular courses in English Speaking, Youth Camps in Ladakhi Culture, Confidence Building, Leadership Development and Preparing Local Youth As Primary Teachers.

Encouraged by the success in organising the above mentioned programmes, SECMOL approached the District Education Officer in Leh for permission to try out its pedagogical ideology, based on modern techniques of teaching and relevant learner-centred curriculum for improving schooling in one of the government schools. Approval was given and the High School in a nearby village (Saspol) was granted. The pilot project of Saspol School was a great success.

Impressed by the Saspol experiment of SECMOL, the Department of Education organised a seminar of school teachers to disseminate and discuss the outcome of the Saspol experiment. At the end of the seminar, teachers not only appreciated the SECMOL inputs in Saspol High School, they also resolved to introduce such reforms in other government schools.

With the growing significance of its activities and programs SECMOL took up bigger challenges by joining hand with other voluntary organisations in Ladakh including Ladakh Ecological Development Group and Leh Nutrition Project, Save the Children Fund, Department of Education of Jammu and Kashmir Government and the local community. The triangular co-operation of NGOs, Government and village community in reforming the education system in Ladakh provided a NEW HOPE for educational development which would meet the needs and aspirations of Ladakhis, and acquired the status of a movement in the form of OPERATION NEW HOPE (ONH). The objectives of ONH include the following:

- To introduce to the public the concept of adoption and improvement of government schools as a better option than opening of private schools;
- To introduce a new activity-based and locally-relevant approach to early childhood education with a view to making schooling less painful and more interesting for children;
- To try to bring government schools (beginning with primary sections) up to or above the efficiency level of private schools
- To produce Ladakhi versions of early primary textbooks and teaching materials to make them more relevant and understandable to Ladakhi children
- To use the above factors to revive the interest, strengthen confidence and enhance the dedication of teachers in government schools.

To realise the stated objectives, the ONH group, spearheaded by SECMOL, have been organising the following programmes:

- Adoption of a single medium of instruction for science and mathematics from the primary level up to the +2, to help address the language confusion, thus bringing the government schools up to par with private schools.
- Regular courses and training for teachers.
- Offering pre-primary level education, where possible.
- A School Support Cell to monitor the project and to provide follow-up and support services to schools and to organise special training and seminars to develop supporting materials (that is, educational games, children's books and new textbooks appropriate to Ladakh).
- A Village Education Committee support team that organises awareness campaigns in all villages.

In 1994, 34 government schools were adopted and transformed under the ONH, their teachers were trained, and the villagers formed a Village Education Committee for each of the adopted government schools to oversee its proper functioning.

As of now, October 2000, all government schools in Ladakh have been brought under the ONH programme. SECMOL has a campus in Phey, about 17 kms from Leh and 3 kms from the Leh-Kargil highway. The campus has residential and academic facilities created for comfortable living and conducting educational programmes. The building and infrastructure have 24-hour solar electricity and water supply. Traditional practices have been integrated imaginatively with modern technological devices to meet the requirements of computerised office management systems and to provide modern training and learning facilities for education and development purposes. The facilities are mainly managed by senior hostel students who are studying at college level while they work part time for SECMOL.

The cherished vision of SECMOL to establish an INSTITUTE OF ALTERNATIVE LEARNING (IAL) that respects the spirit of Ladakh, its culture, life style, knowledge and skills has also taken some shape. However, the vision of the institute is to have the following departments at the SECMOL Campus in Phey:

- Dept. of Handicrafts
- Dept. of Agriculture
- Dept. of Culture Studies
- Dept. of Business Studies in Indigenous Resources
- Dept. of Appropriate Technology Workshops

The Alternative Institute of Learning has a faculty including full-time staff, student-cum-staff and volunteers from other parts of the country and the international community who visit SECMOL from time to time to share their professional expertise with students, staff and trainees at SECMOL.

The volunteers who have come to SECMOL from outside of Ladakh to contribute in its programmes include:

There have been about 15 Indian volunteers, one Ladakhi college student, and over 100 foreign volunteers since 1992. The majority of volunteers contribute in English conversation, games and work at SECMOL youth camps. A few stay longer, including an American engineer who helped install the solar electricity; a computer programmer from Delhi who designed a data-base for the Education Dept. to use on its SECMOL-donated computer to rationalise teacher transfers; two British artists who illustrated primary books; German and American carpenters who helped with the campus building; an English teacher who taught and wrote textbooks; and even an American teacher who decided to stay on as permanent staff.

The beneficiaries of SECMOL activities and programmes run into thousands and include:

- More than 1000 youth have participated in youth camps;
- 800 primary teachers from Govt. schools have been trained in 12-day residential trainings;
- 800 representatives of village communities have been trained in 4-day residential trainings on how to run their Village Education Committees (VECs);
- Around 150 teachers ad education officials have been taken on national and international exposure tours to see different models of educational reconstruction;
- Implicitly, the beneficiaries also include students of all the Primary Govt. School throughout Ladakh.

A brief on Ladakh

Ladakh is one of the three regions of the State of Jammu and Kashmir; the other two are Jammu and Kashmir regions. It occupies the westernmost extension of the high and dry Tibetan Plateau in the extreme northern corner of India. Two of Asia's most eminent mountain ranges bound it by either side; the Himalaya in the south and the Karokoram in the north, both running roughly parallel in a generally south-east to north- west directions.

Because of its geographical situation and its cultural variety, Ladakh is known by various names which give a good description of the regional conditions. The most prominent among the names given to it by local scholars are: *La-dwags* _ the land passes, *Bla-dwags* _ the land of Lamas, *Mar-yul* _ the red land, *Man-yul* _ the land of the people, and *Mnah-ris bskor-gsum* _ Western Tibet. Ladakh has a rich tradition of language and literature, which dates back to the seventh century A.D. The people also refer to the language by different names, the main ones being Tibetan or *Pot-yig, Bho-ti, Bhodi* and Ladakhi.

The land is a rocky, mountainous, inhospitable desert and less than 5 per cent has been cultivated. The Himalayan mountains limit the amount of rainfall in the region to less than five inches per annum (four of which fall as snow,) and the Ladakhis are dependent on streams coming from the melting glaciers for water.

Ladakh region is comprised of two districts, i.e. Leh and Kargil. Leh district is the northern most frontier of the state and is located in the trans- Himalayan Region. Kargil district lies to the west of Leh district. In the North and North East of Ladakh is China. In the North West it has common boundary with Lahaul-Spiti areas of Himachal Pradesh.

Leh district with a geographical area of 22,665 sq. kms is the largest district in the country in terms of area. The Indus river passes through Leh district covering almost 640 kms

Leh district has only one tehsil which is divided into five blocks, namely Leh, Khalsi, Nubra, Durbuk, and Nyoma. Leh has a democratic local self-government, headed by Chief Executive Councillor, assisted by five Executive Councillors and a CEO besides elected councillors. The total population of Leh district is around 1.5 lakhs. No monsoon reaches the district because of mountain barriers. Annual rainfall of Leh is 92 mm per year. In the brief summer season between June and August the maximum temperature ranges between 20 to 30 degrees. Humidity is very low, around 10 degrees. In winter temperature becomes as low as minus 30 degree centigrade.

Majority of Population in Leh district (87,25 per cent is rural based and the remaining 12.75 per cent is semi-urban. The literacy level is 24.43 % *"aJu-lai"* (julley) is the word which is used by every Ladakhi to greet both acquaintance and stranger alike. It literally means "good digestion" although it can have other similar meanings. This word is also used to say welcome, thank you, and farewell

The Ladakhis are mostly Tibetan-Mongoloid in appearance - a healthy looking people, deep brown in colouring due to the strong summer sun. Many Ladakhis are nomads and herd goats, noted for their fine pashmina wool, to high altitudes in summer. Although the Islamic influence extends out of the Kashmir valley as far as Kargil in Ladakh, the predominant religion is overwhelmingly the Tibetan, Lamaist form of Buddhism, in 1971 literacy in Ladakh was only 14 per cent.

AN INSIGHT INTO LADAKH

There are many geographical and historical factors which make Ladakh a unique region in India. It nestles in the western Himalayas in the extreme north east in the state of Jammu and Kashmir. Most of Ladakh lies between 8,000 and 13,000 feet above sea level and the capital, Leh is at 11,500 feet.

Ladakh, because of its geographical situation and its cultural variety, is known various names which give a good description of the regional conditions. The most prominent among the names given by local scholars are: the land of passes, the land of the Lamas, the red land, the land of the people and Western Tibet. Among the popular names given by the western scholars are: the land of Lamas and Gompas, Little Tibet and western Tibet. According to a Kashmiri proverb: Ladakhis eat *Sattu (roasted barley flour}* , wear *Pattu (woollen clothes)* and ride on *Tattu (ponies)*. Ladakh has a rich tradition of language and literature, which dates back to the seventh century A.D. The people also refer to the language by different names, the main ones being Tibetan, Bho-ti, Bhodi and Ladakhi.

The land is a rocky, mountainous, inhospitable desert and less than 5 percent has been cultivated. The Himalayan mountains limit the amount of rainfall in the region to less than five inches per annum {four of which fall as snow,) and the Ladakhis are dependent on streams coming from the melting glaciers for water. The fields are small and very often terraced to allow for easy irrigation. Through the centuries the Ladakhis have created the most efficient irrigation system with canals sometimes running over one kilometre rock faces. Most Ladakhis live in small agricultural communities where they are almost self-sufficient. To the east in the Changthang area nomadic communities are found who rely on sheep, goats and yak for their livelihood. The towns of Leh and Kargil have evolved from being important trading posts on the routes from Punjab and Kashmir in the west, to Lhasa in the east or Yarkand and Sinkiang in the north.

The Ladakhis have a short but warm summer when they are very busy cultivating the staple foods of barley and wheat. They also grow vegetables, apricots and apples. The winters are extremely cold when the night temperatures can reach as low as minus 30 degree Centigrade. All agricultural work stops and everyone tries to keep warm as best they can. Trees, which are usually varieties of willow and poplar, are very precious and are used in building construction and ornamental carving. The most common fuel is animal dung.

Handicrafts were significant in traditional Ladakhi society. Among the popular handicrafts were spinning, weaving, wood carving and painting. According to popular tradition, the weaving of cloth and grinding with water-mill were the two earliest industries in Ladakh. Embroidery also received a great deal of attention and the people engaged in this work received well-deserved recognition.

The Ladakhis are very fond of singing and dancing and they have not forgotten the songs sung by their ancestors, having adopted and preserved them as part of their heritage.

Drama is also an important part of the Ladakhi heritage and since the people of Ladakh have been practising Buddhism from early times it is not surprising that the history of the past lives of the Buddha is the main theme of the traditional dramas

Traditional medicine flourishes in Ladakh and is called the *Am-chi system* or the Buddhist medical system which was taught by the enlightened Buddha more than 2,500 years ago.

The new Year celebration is an important part of the Ladakhi cultural tradition. Unlike the Tibetans, or any of the other neighbouring Himalayan people, the Ladakhis celebrate their New Year or *Lo-gsar* on the first day of the eleventh lunar Tibetan calendar month.

As in many other cultures the New Year celebration has a special place in Ladakhi society. It marks a time of transition. The smiths and the carpenters stop working and place lighted butter lamps close to their tools. The illuminations, the ceremony of making effigies of seven ibex from wheat flour and then baking them on the kitchen fire, and the ritual of tying a branch of the evergreen juniper to the main pillar of the kitchen are very important features of the celebration.

It is recorded in many historical writings that the Ladakhis were honest, kind and hospitable people. Theft and cheating were unknown and the killing of small insects was sinful.

Modern tourism is a novelty for Ladakh, although European travellers and traders have been coming through the area on their way to Central Asia for some time. With the construction of the road to Srinagar and the opening of the area to world tourism in 1974, it has been attracting the attention of Tibetologists, anthropologists, historians, art-lovers and others.

In 1947 India became free from British rule and Pakistan was created by partition. Ladakh, together with most of the rest of Jammu and Kashmir, remained with India

On July 4, 1949, Pandit Jawahar Lal Nehru, the Prime Minister of India, visited Ladakh together with Sheikh Mohammed Abdullah, the Prime Minister of the State of Jammu and Kashmir. Pandit Nehru's visit coincided with the very first democratic election in Ladakh. The date of 26th May 1950 is very significant in the Buddhist history of Ladakh. In fulfilment of a promise made by Pandit Nehru during his visit, the relics of the Lord Buddha and his two principal disciples, Sriputa and Mahamonglan, were brought to Ladakh.

After Pandit Nehru's visit to Ladakh, the area received considerable publicity and was recognised as an important Buddhist region of India.

On the 24th May, 1956, the 2,500th anniversary of the birth of the Lord Buddha was celebrated in Ladakh as in other parts of the country. As a gesture of goodwill, the Jammu and Kashmir government budgeted Rs. 15,000 for the event The whole town of Leh, capital of Ladakh, was illuminated at night

The 2,530th Buddha Jayanti on 23rd May 1986 had a special significance in the history of Ladakh. In that year the celebrations took place on the open ground close to *Mani Sermo* , at Leh.

Inspired by Pandit Nehru' words on his personal feeling and affection for Buddhist education, the Ladakh Buddhist Association and the Gonpa Association decided to establish an institution which could impart instruction in Buddhist Philosophy and other related subjects. Accordingly on October 23rd 1959, the Buddhist Philosophy School (now called the Central Institute of Buddhist Studies) was established. At first it had only ten students; one each from Hemis, Chemre, Thikse, Stakna, Matho, Spituk, Pheyang, Likir and Ridzong monasteries. In 1962 it was formally recognised as an autonomous state institution and it started receiving government grants. On 18th April 1985 the School celebrated its silver jubilee.

In the last three decades, since the Chinese take-over of Tibet, Ladakh has been fortunate to have been visited by many of the most important Tibetan religious leaders. H.H. the Dalai Lama has come on several occasions.

In 1988 the Students' Educational and Cultural Movement of Ladakh (SECMOL) was perhaps the one of the very few non governmental initiatives taken by a group of educated youth who felt concerned about the status of formal education in Ladakh and revival of its rich cultural heritage.

ANNEXES

THE SCHEME OF 'OPERATION BLACKBOARD'

The Policy and Perspective

Universalization of Elementary Education (UEE) has been one of the goals of educational development. Provision of free and compulsory education to all the children until they complete the age of 14 years is a Directive Principle of the Constitution. It is a part of the Minimum Needs Programme as well as the 20-Point Programme 1986. The National Policy on Education, 1986 also gives an unqualified priority to UEE. It resolves that it shall be ensured that all children who attain the age of about 11 years by 1990 will have had 5 years of schooling, or its equivalent through the Non-Formal stream, and, likewise, by 1995 all children will be provided free and compulsory education upto 14 years of age.

2. The policy embodies the concept of a National System of Education that lays emphasis on elimination of disparities in the educational system and on improvement in the quality of publicly funded schools so that whatever the socio-economic background of the student, upto a given level he/she has access to education of a comparable quality. The Programme of Action of the NPE aims at achieving the goal of a Common School System, through strategies that focus effort on the underprivileged, the economically weak, the educationally disadvantaged, and the areas that need special attention. It recommends that at the elementary level a child-centred approach will be adopted and the academic programme and school activities built around the child. It also proposes measures to effect improvement in the quality of education through reform of the content and process of education, improvement in school facilities, provision of additional teachers, laying down minimum levels of learning, etc.

3. The Union Government has accepted a larger responsibility in regard to maintenance of quality and standards of education at all levels of the educational process throughout the country. But the role and responsibility of the States remain undiminished—implementation of the NPE must engage the States' full attention, and it is only if the task of implementation is taken up with vigour, persistence and a sense of urgency that the new schemes of quantitative expansion and qualitative improvement, aimed eventually at a transformation of the whole system, have any chance of being realised.

Components of Operation Blackboard (OB)

4. The scheme for a substantial improvement in facilities in primary education has symbolically been named OPERATION BLACKBOARD (OB). OB lays down the minimum level of facilities to be provided in all primary schools which have been established so far, and it also prescribes the minimum level of funding for all new primary schools to be opened in future. There are three interdependent components of OB:

(1) Provision of at least two reasonably large rooms that are usable in all weather with a deep verandah alongwith separate toilet facilities for boys and girls.

(2) Provision of at least two teachers, as far as possible one of them a woman in every primary school.

(3) Provision of essential teaching and learning material including blackboards, maps, charts, a small library, toys and games and some equipment for work experience.

OB is to be implemented in municipal areas as well as villages. Its scope is confined to primary schools (viz. schools upto Class IV or V depending upon the structure in different States/UTs) upper primary schools and secondary schools, even if they have Classes I to IV/V, are not covered under this scheme.

5. The coverage of OB is to be extended to all primary schools run by Government, local bodies, Panchayat Raj institutions and recognised aided institutions. It needs to be kept in mind that this scheme is meant for educational institutions which have remained deprived of facilities and resources in the past.

Selection of Blocks and Municipal Areas

6. Over the next 2-3 years OB will be implemented in the entire country. This will, however, be done in a phased manner, beginning with 20 per cent of the blocks and municipal areas in -1987-88, 30% in 88-89 and 50% in 89-90. The first step in implementation of OB is to select CD blocks/municipal areas for implementation. In the selection of blocks, the following considerations may be kept in view :-

(a) No district may be left out.

(b) Additional blocks may be given in a reasonable proportion to the total number of blocks in a district.

(c) Preference in the selection of blocks should be given to those which are educationally disadvantaged and have concentration of persons belonging to Scheduled Castes and educationally disadvantaged Scheduled Tribes and minorities.

The State Governments may lay down certain other criteria in the process of selection. The governing consideration should be greater people's participation, possibilities of success of the scheme and the overall strategies spelt out in NPE.

7. The criteria for selection of municipal areas will have to be worked out by the State Governments themselves. It is suggested that smaller municipal areas should be treated as a single unit and a percentage of such areas in a district may be taken up. As far as large cities are concerned, implementation of the scheme in the first year should be restricted to 20 per cent of the municipal wards.

Survey and Project Formulation

8. Survey of existing facilities is to be undertaken as soon as selection of CD blocks and municipal areas has been completed. The proforma for survey has been evolved in consultation with NCERT and has been communicated to the States separately.

9. There are two distinct categories of survey under OB. One, in respect of 20 per cent CD blocks and municipal areas in which OB is to be implemented in 1987-88; and two, survey of the remaining 80 per cent of the CD blocks and municipal areas in which OB will be implemented in the next 2-3 years. As far as the first category is concerned, viz. 20 per cent of the blocks and municipal areas, special survey drive have had to be undertaken. In respect of the second category, viz., the remaining 80 per cent of the blocks and municipal areas, the survey sheets will be canvassed alongwith the Fifth All India Educational Survey. In respect of this category NCERT has issued detailed instructions for the survey staff.

10. The reference date for survey under OB is the same as for the Fifth All India Educational Survey, viz., 30 September 1986. This date will also hold good for determining the number of single teacher schools, which have to be provided second teacher under OB.

11. The results of the survey have to be compiled in two parts; Part I—relating to the requirement of additional teachers for the single teacher schools. Part II—the remaining data, viz., availability of buildings and teaching/learning materials to be compiled with the form of a block project. The block project will include block wise and municipality-wise consolidated data—existing facilities as well as deficiencies. The block project will also indicate the measures taken for involvement of teachers, local communities and necessary assurances regarding land, fencing, maintenance, replacements etc. Mention should also be made in the block projects regarding appointment of women teachers and the measures taken for ensuring that the teachers appointed will in fact serve at the place of their posting.

Construction of School Buildings

12. No separate funds are being provided under OB by the Ministry of HRD (Department of Education) for construction of primary school buildings. Some State Governments were provided funds by the Eighth Finance Commission for construction of school buildings and steps should be taken for timely and planned use of those funds. National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEGP) have considerable funds in all States/UTs. A decision has been taken at the highest level to give high priority under these schemes to construction of primary school buildings. This decision has been incorporated in the manual recently brought out by the Ministry of Agriculture (Deptt. of Rural Development), Government of India. This priority has been reiterated by the Department of Rural Development vide their Secretary's instructions to State Governments in his D.O. letter. No. M. 20042/27-85 RLEGP dated 30-7-87. The Coordination Committee set up by all State Governments under the chairmanship of Chief Secretary to oversee implementation of NPE should be able to ensure that adequate funds become available under NREP/RLEGP for the programme of construction of primary school buildings. It may be clarified that the essential parameters of NREP/RLEGP will remain unchanged even when these programmes are used for OB. The following further clarifications are given in this regard :

(A) Necessary land for construction of school buildings, including land for games and sports, has to be provided by the local community.

(B) The local community, preferably Village Education Committees, have to give a formal undertaking that they shall take responsibility for repair and maintenance of the building.

(C) The local community has also to take responsibility for an appropriate fencing around the school compound. It could be a pucca wall or hedge or barbed wire, but sufficient to prevent the school compound becoming a thoroughfare for humans and cattle.

(D) The proportion between labour and material component under NREP and RLEGP is 50:50. If the requirement of material is more than that, it will have to be provided by the State Governments, local bodies or the village-community. In the case of NREP, it may be possible-to lump the work of primary school building with other works, such as social forestry and deficiency of village tank, and thereby ensuring 50:50 ratio between labour and material components.

(E) Each of the rooms to be constructed should be approximately 30 sq. mtrs. in area and the verandah of approximately 9-10 feet depth. Even if there are two rooms in existence at present, but their area is much less and they are not satisfactory, new rooms may be constructed.

(F) Provision of separate toilets for boys and girls must form part of the construction activity. Toilets should be so constructed that they inculcate desired toilet habits-among children and the construction and maintenance-of toilets should be such that it should be possible to keep them clean.

(G) Each State Government should get good architectural design made for construction of primary school buildings. These designs should be modular, in that they should provide scope for expansion of the building programme. Every effort should he made to utilize local materials and keep the cost of building low. They should be adequate, without being ostentatious and should merged well with the village environment. It should also be ensured that there is built-in space for storage of equipment, and well-plastered blackboards should also form part of the structure, itself, in the rooms as well as at both ends of the verandah.

(H) Several States are faced with an acute drought situation this year and considerable expenditure is likely to be incurred on provision of relief works to drought affected families. The possibility should be explored of the labour component on school buildings being met out of these relief works if the funds for material component can be found from some other source under the control of the State Government, the local bodies, or Village communities.

13. As far as municipal areas are concerned the State Governments will have to make necessary arrangements for school buildings. It may be possible in some municipal areas to allocate municipal funds for this purpose. At some places it may be feasible to levy education cess on property or a general municipal tax. At some places,

it may be possible to raise donations from charitable and philanthropic persons/organisations. Yet another possibility is to take additional space on rent. The Central Government would not be able to take any responsibility in respect of buildings for the municipal areas.

Provision of second teacher in single teacher schools

14. The percentage of single teacher schools has been going down in the country. However, in some States the number of such schools continues to be alarmingly large and it adversely affects educational standards. This problem is, however, confined to rural areas. A second teacher will be provided as a part of OB for all single teacher schools in the 20 percent CD blocks in 87-88, in another 30% blocks/municipal areas in 88-89 and in the remaining in 89-90. The relevant date for determining the number of single teacher schools, as already clarified above, is 30 September 1986. The following considerations are to be kept in view while implementing this component of OB :-

(a) The State Government will need to give a categorical assurance that all new primary schools opened will be provided two teachers.

(b) To the extent possible all new teachers to be appointed should be women. It will be advisable if every school has at least one woman teacher. However, if women teachers cannot reside in the village where they are posted or cannot easily commute there, the second teacher may also be male, but corresponding increase in the number of women teachers should be made in urban areas or in other locations where it is possible to increase the number of women teachers.

(c) In the appointment of teachers spatial considerations need to be kept in view. If trained teachers belonging to remote rural areas are available they should be given preference, without disturbing the broad policy regarding appointment of teachers. Likewise, preference should be given to trained teachers belonging to SC/ST.

(d) In some States/UTs there are a number of trained teachers awaiting appointments for several years. In all cases where persons trained 2-3 years prior to their appointment (and if they were not working as teachers in the intervening period) are appointed, they should be provided a suitable refresher course, say of one month duration. Necessary preparations for this purpose should be made immediately. The material prepared by NCERT for the massive summer vacation teacher training programme could also supplement other re-sources.

Instructions for Learning Material

15. The essential facilities in primary schools have been spelt out in the Annex-I. This list has been prepared after a great deal of examination and should hold good /or all schools through out the country. However, those State Governments/UT Adms. - which consider it essential to make departure from this list may do so provided that they can give sufficient justification therefore and it does not lead to increase in costs.

16. There is an insistance under OB on purchase of material of good quality. The

past experience shows that the existing financial procedures oblige educational administrators to go in for the cheapest material, which is generally of sub-standard quality. Under OB specifications are being worked out in respect of various items which lend this to such disruption. The Bureau of Indian Standard (formerly known as Indian Standards Institution—(ISI) has been requested to lay down specifications in consultation with educationists and class room teachers. Meanwhile State Governments may work out their own specifications which can be used for 1987-88.

17. As soon as possible the work experience programme in upper primary schools and secondary/higher secondary schools should be modified to manufacture as many items required under OB as possible. As a part of work experience the students should also be trained to produce material of good quality and dilution of specifications should not be permitted. Even polytechnics and ITIs should be encouraged to set up manufacturing units as envisaged under "earn-while-you-learn" projects.

18. The responsibility for replenishment of materials will have to be borne by the State Governments or the local bodies as the case may be. Funds for this will have to be provided in a systematic manner and while making proposals for sanction of funds under OB State Governments would be expected to give necessary indications in this regard.

19. In addition to bringing about necessary changes in the procedure for purchase of instructional learning material, it will also be necessary to reorient the teachers and to build an atmosphere in which teachers use the material provided under OB and also improvise instructional material on their own initiative. This will have to be built into all programmes of teacher education- pre-service as well in-service. In addition small simple booklets should be brought out by SCERTs to facilitate proper use of this material. It will also be necessary to make necessary changes in the financial/accounting procedures and audit requirements.

Financial Pattern and Procedure for Sanction

20. OB is a centrally sponsored scheme. No separate funds have been provided under it for construction of primary school buildings in rural areas. It is to form part of NREP, RLEGP and other appropriate schemes, including special area development schemes such as Tribal Sub-Plans, Hill Areas Development Programme, Border Area Development Programme, etc. Funds for appointment of second teachers in single teacher schools and for purchase of instructional/learning material will be provided by the Central Government on hundred per cent basis upto the end of the Seventh Plan. It shall be necessary for the State Governments to draw up, and adhere to, a detailed plan for construction of primary school buildings as envisaged in OB. While sanctions may be issued in 1987-88 releasing Central funds for second teachers and equipment, etc. on the basis of the detailed plans in the subsequent two years the progress of construction of buildings will be evaluated before consideration of proposals for funds under OB. The liability in respect of teachers' posts will get transferred to the State Governments after the Seventh Plan. Necessary steps should be taken now itself to ensure that the liability during the Eighth Plan gets treated as committed expenditure by the Ninth Finance Commission. The Central assistance is contingent upon the State Governments and/or local bodies and/or the local community taking responsibilities as spelt out in this and the preceding paragraphs. Their responsibilities would include the following :-

(1) Detailed information regarding the manner in which buildings as envisaged in OB will be got constructed within a well-defined time-frame.

(2) Provision of contingency at the rate of Rs. 500/- per annum for every primary school.

(3) Provision of land and fencing.

(4) An undertaking regarding repair and maintenance of school buildings.

(5) An assurance that in future all sanction of primary schools teachers and equipment would be provided at least at the level envisaged under OB.

(6) An assurance that all teachers appointed under this scheme will be put through in-service training in a time-bound programme.

(7) Provision of funds for replenishment of equipment.

In addition to these, the State Governments will also have to take steps for detailed micro-planning for universal enrolment and retention at the elementary stage, which is the basic objective of OB. Measures will also need to be taken for involvement of teachers and the local community not only in planning and implementation of OB but to create an upsurge for universalisation of elementary education. It may also be necessary to strengthen the administrative structures at the elementary stage, for which there will be no centrally assisted scheme.

21. The projects prepared at the block level will be sanctioned by a State Level Empowered Committee which may be headed by Chief Secretary/Development Commissioner/Education Secretary. Its membership should include all persons necessary to give final clearance. The Central Government will be represented by 2 or 3 persons—one from the Ministry, the other to represent Finance and the third to represent NCERT. The Empowered Committee should have powers to make final sanction, which will be honored by the Central as well as the State Governments/UT Administrations.

22. The Project proposal for each block or municipal area will be prepared separately. The State Government will have to ensure that the format for preparation of project report is the same for all block/municipal areas. The project report for a block/municipal areas should give the number of primary schools being covered under Operation Blackboard and the deficiency in regard to building, second teacher and each item of essential equipment (as per list at Annex-I). As mentioned in Para 20, necessary details regarding the source of funds and time-frame will be given in respect of the buildings component. The Empowered Committee for Operation Blackboard will sanction the block/municipal area-wise project in so far as they relate to the second teacher and the essential equipment. It will be advantageous if all the proposals for the year for the State are placed before the Empowered Committee for sanction in one meeting but in the interest of the speedy execution of the programme the Empowered Committee can consider the proposals in regard to the

blocks/municipal areas in more than one meeting, as they become available. Similarly the Empowered Committee may consider sanction for second teacher separately from, the sanction for essential equipment. However, no sanction of Central funds will be considered unless a clearly spelt out plan for construction of primary school buildings, as envisaged in OB, is presented to the Empowered Committee.

23. Since second teacher is to be sanctioned in places where there is only one teacher in the school, all second teachers will be fresh entrants to the service. Therefore, salary for the second teacher should be computed at the minimum of the pay scale prescribed for the primary school teacher in the State concerned along with the dearness and other allowances, admissible. The Central assistance for such teachers e.g. those recruited in 87-88 will be computed for 88-89 after adding the amount of due annual increment.

24. As far as equipment is concerned the list of essential equipment along with the estimated cost of each item is at Annex-I. The costs mentioned of individual items are estimates only and the actual costs of items, may be more or less the same in many states. The cost of procuring an individual item can therefore vary but effort will have to be made to keep the average cost per school of the whole set of equipment near-about Rs. 7125/-. Naturally, most schools will have some of these items already. The survey of the identified blocks will indicate the availability of items in each school. The list in Annex-I gives the number of each item that should be available to each primary school. The deficiency of items in each school may be worked out on the basis of this norm. Therefore, the block/municipal area project report under Operation Blackboard will compute the requirement of each item and the requirement of funds on this basis. The list at Annex-I gives the norm of availability for a primary school (I to IV or V) with one section to each class. If a primary school has more than one section to each class (I to IV or V) the norm may be taken as twice the number given in the list at Annex-I. Further, with regard to teachers' furniture and blackboards, the requirement may be calculated for every teacher and every class-room in the school if they lack this facility. In computing the deficiency for blackboard in schools where new building will be constructed it may be borne in mind that blackboard will be built into the wall. Therefore, while computing funds for blackboards, the requirement of blackboards for existing buildings should alone be computed.

25. On the basis of sanctions made by the Empowered Committee the funds will be released by the Government of India. For equipment 50 % of the requirement for the year will be sanctioned immediately after the block/municipal area-wise projects are sanctioned by the Empowered Committee and the remaining amount will be released when the State Government is able to report the progress of expenditure showing that 75% of the earlier amount has been spent. For second teacher 50% of the requirement for the year will be sanctioned when the State Government has created the post for the second teacher and the rest will be sanctioned when the State Government is able to show the progress of expenditure indicating that 75% of the earlier amount has been utilised. For 1987-88 however, since the scheme will come up under implementation in the middle of the year, the whole of the amount for the year will be sanctioned on the basis of the sanctions made by the Empowered Committee.

Procurement of Equipment

26. The list of essential equipment is at Annex-I. As specified in para 16, the Bureau of Indian Standards (viz. Indian Standards Institute) is determining the specifications for equipment. After these become available, it will be obligatory for States to procure equipment conforming to the specification. Till then the States may exercise their judgment in procuring equipment but care should be taken that it is of good quality. As has been suggested in para 17, it will have to be examined what equipment can be fabricated/manufactured witnin the educational sector under the Work Experience Programme or in Polytechnics/ITIs. Procurement should be done from the market only to the extent it cannot be fabricated/manufactured within the educational institutions. Since general inquiries do not always attract the best suppliers, it would be desirable to identify manufacturers within and outside the State who can supply the desired equipment of acceptable quality. While placing order for supply of the equipment, sample would naturally be obtained but in addition it is necessary that as many samples of approved quality are obtained as are the receiving officers in the districts/blocks so that they can tally the supplied equipment with the approved sample when the supplies are made. At the district/block level where the supplies are made, different items of equipment will be received from the suppliers in different numbers and over a period of time. Obviously it will lead to considerable damage and disorder if items are supplied to the school piece-meal. Therefore, the State Government should attempt to work out an arrangement at district/block level where-under the complete set of items to be supplied to a primary school is supplied in one lot. An educational institution having adequate storage place at the district/block level could appropriately be the specified point where supplies would be made by the suppliers and an appropriate number of officials could be deputed for this duration to receive the supplies to tally the quality with the approved sample, and take responsibility for delivery to individual schools.

Monitoring System

27. Operation Blackboard is a programme having many aspects. It is designed to be one of the important vehicles for achieving the target of universal primary education by 1990. Therefore, it is important to have a proper management information system for the programme. The Ministry is taking steps to develop such system with the assistance of experts in this field. For the implementation of the programme itself i.e. to monitor that all the schools progressively get essential facilities envisaged in the Operation Blackboard, a system of quarterly monitoring will be followed. The State Government will supply information for each quarter by the end of the succeeding month to the Ministry in the proforma at Annex-II.

Annex – I (a)

Essential Facilities at the Primary Stage

		Numbers	Amount in Rs.
I.	**Teachers' equipment**		
	i) Syllabus	01 set	05
	ii) Textbooks	One primary set	25
	iii) Teachers' guides	- do -	15
II.	**Classroom teaching materials**		
	i) Maps - District State Country World	One each	175
	ii) Plastic globe	01	100
	iii) Educational charts (health, social studies, language)	One set	90
III	**Play materials and toys**		
	i) Wisdom blocks (construction of different designs, patterns, objectives etc.)	3 sets	120
	ii) Bird and Animal Puzzle (jigsaw puzzle)	3 sets	60
	iii) Toys (dolls, human, figures, animals, science toys)	2 sets	300
IV	**Games equipment**		
	i) Skipping rope	10	60
	ii) Balls – football	02	70
	volley bal	02	70
	rubber balls	10	50
	iii) Air pump	01	35
	iv) Ring	05	50
	v) Swing rope with tyre	01	35
V.	**Primary Science Kit (of NCERT)**	01	400
VI.	**Mini Tool Kit (of NCERT)**	01	300
VII.	**Mathematics Kit**	01	300
VIII.	**Books for Library**		
	i) Reference books -		
	Dictionaries	02	100
	Encyclopedia	01	100
	ii) Children's books (at least 200) (NBT, Children's book trust, Nehru Bal Pustakalaya and other)		1600

	iii) Magazine, journals and news papers for teachers and children (one newspaper, one magazine and one professional journal)		450
IX	**School Bell**	01	50
X	**Musical Instruments** Dholak or Tabla Harmonium Manjira	 01 01 02	 100 500 50
XI	**Contingency money with teachers**		Recurring
	i) Mats and furniture for students and teachers (one chair and one table for one teacher + 2 large boxes) For teachers Mats Boxes	 02 sets - 02	 700 375 300
XII	**Block Board**	02	400
	Pin-up board (canvas)	02	50
XIII	**Chalk and duster**		30
XIV	**Water facility (pitchers, glasses and ladle)**		100
XV	**Trash can**	10	50
			7215

Annex – I (b)

Item No. VII of the List
Primary Mathematics Kit

	Item	Quantity
1.	Dominoes	*Two* sets each containing 55 pieces
2.	Spike-Abacus	*One* set of four abacuses with four, five, six and seven spikes
3.	Napier strips	*Two* sets each containing 10 strips
4.	Solids	*Two* sets each containing five solids
5.	Fraction-disc	*One* set
6.	Cubic-rods	*One* set
7.	Cuisenaire strips	*Two* sets

Annex – I (c)

Quarterly Statement for Reporting Progress in Operation Blackboard

Item

I. School Buildings

(i)	(ii)	(iii)	(iv)	(v)
Unit	Requirement as per sanctioned project reports	No. sanctioned for construction	No. where construction has started	No. where construction has completed
Two rooms				
One room				
Toilets				

II. Appointment of Second teachers

i) Number of second teachers required according to sanctioned project reports
ii) No. of posts sanctioned
iii) No. of teachers posted
    a) male
    b) female

III. Provision of essential facilities

i) No. of schools to be covered as per project reports.
ii) No. of schools to which supply of essential facilities have been completed.

IV Provision of Funds

i) unspent balance at the beginning of the year.
ii) Amount received from government of India during the year
iii) Amount spent during the year:
    a) Upto the end of previous quarter
    b) During the quarter for which report is being submitted

Total expenditure ____________________

DISTRICTS SELECTED IN STATES FOR THE SURVEY STUDY

Sl. No.	States	Districts
1.	Andhra Pradesh	1. Karim Nagar
		2. Vishakhapatnam
		3. Nalgonda
		4. Cuddapal
2.	Arunachal Pradesh	1. Lohit
		2. Lower Subansiri
3.	Assam	1. Barpeta
		2. Dibrugarh
		3. Karbianlong
		4. Cachar
4.	Bihar	1. Rohtas
		2. Paschim Champaran
		3. Muzzaffarpur
		4. Saharsa
		5. Bhagalpur
		6. Ranchi
5.	Goa	1. South Goa
6.	Gujarat	1. Kachch
		2. Rajkot
		3. Surat
		4. Panchmahals
7.	Haryana	1. Bhiwani
		2. Yamuna Nagar
8.	Himachal Pradesh	1. Shimla
		2. Chamba
9.	Jammu and Kashmir	1. Leh
		2. Udhampur
		3. Punch
10.	Karnataka	1. Belgaum
		2. Dakshin Kannada
		3. Gulbarga
		4. Tumkur
11.	Kerela	1. Wayanad
		2. Kottayam

12.	Madhya Pradesh	1.	Gwalior
		2.	Damoh
		3.	Indore
		4.	Vidisha
		5.	Bilaspur
		6.	Bastar
13.	Maharashtra	1.	Ahmadnagar
		2.	Akola
		3.	Chandrapur
		4.	Satara
14.	Manipur	1.	Imphal
		2.	Churachandpur
15.	Meghalaya	1.	East Garo
		2.	Jaintia Hills
16.	Mizoram	1.	Lungei
17.	Nagaland	1.	Mon
		2.	Kohima
18.	Orissa	1.	Koraput
		2.	Khordha
		3.	Sambalpur
		4.	Mayurbhanj
19.	Punjab	1.	Gurdaspur
		2.	Faridkot
20.	Rajasthan	1.	Jaisalmer
		2.	Udaipur
		3.	Nagaur
		4.	Hanumangarh
21.	Sikkim	1.	South Sikkim
22.	Tamil Nadu	1.	Chenqalpattu MGR
		2.	Coimbatore
		3.	Tiruchirappalli
		4.	Tirunelveli Kattabomman
23.	Tripura	1.	West Tripura
24.	Uttar Pradesh	1.	Tehri Garhwal
		2.	Nainital
		3.	Shahjahanpur
		4.	Hamirpur
		5.	Faizabad
		6.	Varanasi

25.	West Bengal	1. Jalpaiguri 2. Maldah 3. Midnapur 4. Barddhaman
26.	Andaman and Nicobar Islands	
27.	Delhi	All Blocks
28.	Pondicherry	1. Pondicherry

GUIDELINES

Common to all Schedules

For collecting information / data on various items in the schedules:

(a) Obtain Project Reports from concerned officers in the Education / Engineering Departments and study them carefully, get doubts cleared from them before entering or recording data.

(b) Interview concerned persons courteously to solicit replies.

(c) After entering required facts and figures in the appropriate columns/items, show them to the concerned persons to be satisfied with their correctness.

(d) Don't forget to note down in your Field Notes Diary:

  i) Names and designations of persons who supplied data to you.
  ii) Date and time of each one's interview and
  iii) The address in detail of the offices / officers interviewed.
  iv) Thank them courteously before leaving the office.

Guidelines For Schedule – I

Item (3) :

There are three response columns against each sub-item. This is because,

a) Initially Distt./ Block level Heads of offices were required to identify suitable schools for OB implementation. That number should be noted under number "*identified*"

b) The higher authorities after scrutinizing the identified list, granted sanction to selected ones only. This number should be entered under "*sanctioned.*"

c) Sometimes, it may not have been implemented in all the sanctioned schools due to various reasons. So the number "*actually covered*" may be less than sanctioned. This number should be entered in the last column.

Item (4) : (ii) and (iii) :

Articles may have been supplied

(ii) in different phases, indicate all of them

(iii) on different dates, indicate all of them.

(iv) In (a) and (b), you are required to get information and describe briefly (in about 3-4 lines each).

(v) This is an open–end item and you are required to record in the open space below a brief description of the replies given.

For other items :

You see two things :

(i) Code numbers – (1), (2), (3) and (4) etc. for alternative possible replies. Identify which reply is applicable or is a fact or opinion, put a tick (   ) mark on the alternative and enter its code number in the rectangular blank block given against each sub-item.

Item – 6: Name the Schemes / Projects under operation against (i), (ii), (iii) etc. and below them. If you think any observation is necessary, write them briefly below.

Brief descriptions of replies are to be entered in your own words in the space given below.

Annexure III

Schedule - I

Operation Blackboard : A Survey

STATE / DISTRICT / BLOCK SCHEDULE

Identification data

		Code
State	-------------	
District	-------------	
Block	-------------	

Address of Office :

Pin code:--------------------------------

Phone (if any):-------------------------

1. Is the respondent of the schedule related to

State (1)
District (2) ☐
Block (3)

2. Implementation of Operation Blackboard Scheme.

(i) Year in which first covered under OB ☐

(ii) Enter Phase Code and year for Implementation of the scheme

Phase	Code for phase Yes (1) No (2)	Year of Implementation
I		
II		
III		
IV		
V		
VI		

3. (a) Number of schools covered by OB in all phases under particular aspects.

Sl. No.	Particular aspects	Number of schools		
		Identified for OB	Sanctioned for OB	Actually covered under OB
i)	Supply of Teaching Learning Materials			
ii)	For posting additional teachers a) Second Teacher			
	b) Third Teacher			
iii)	Construction of Buildings a) New buildings with toilets.			

	b) Schools in which additional rooms have been provided			
	c)Toilets only			
	d) Newly constructed separate toilets for Boys			
	e) Newly constructed separate toilets for Girls			

3. b) Number of Teachers covered by OB Scheme in All Phases

Sl. No.	Particular aspects	Number of Teachers		
		Identified for OB	Sanctioned for OB	Actually covered under OB
a)	*Training / Orientation in OB* Training of Head Teacher			
b)	Training of Other Teachers			
c)	No. of Women Teacher among them			

4. Distribution of Teaching Learning Materials under OB Scheme

i) Procurement Arrangement :
  - a) State level Yes (1) No (2) ☐
  - b) District Level Yes (1) No (2) ☐
  - c) Block level Yes (1) No (2) ☐

ii) Mode of distribution of teaching meterial and its distribution

Phases	Mode of distribution (Enter Code given below)	Dates on which OB teaching learning material received.	Dates on which OB material was distributed to the next level.
I			
II			
III			
IV			
V			
VI			

* State Hq to Dist Hq (1) State Hq to Block Hq (2)
State Hq to Schools (3) Dist Hq to Block Hq (4)
Dist Hq to Scchools (5) Block Hq to Schools (6)
None of the above (7).

iii) Give details about procurement and monitoring of OB Scheme.

a) Procedure followed for procurement of OB material

b) Procedure followed for monitoring of supply etc.

iv) Mention problems faced, if any, in procurement/ distribution .

v) Quality control about OB scheme.

a) Specimen provided Yes (1) No (2) ☐

b) Supplies verified vis-a-vis specimen Yes (1) No (2) ☐

c) If Yes in (b), then state whether
i) all supplies verified (1)
ii) sample checked only (2) ☐

d) State the action taken in case the supply of OB material was not in conformity with specifications

- i) Returned to supplier (1)
- ii) Only those items, which conform with specification were sent to school (2)
- iii) All items including defective items sent to school (3)
- iv) Awaiting instructions from superiors (4)

☐

e) If the supplies were not checked vis-à-vis the specifications, state the reasons covering the following points.

- i) No clear instructions in this regard (1)
- ii) In shortage of time (2)
- iii) Faith in the supplier (3)
- iv) Any other --- specify (4)

☐

5. Inspection and supervision (1997-98)

a) Number of schools proposed to be inspected and actually inspected.

Periodicity	Norms fixed for Inspection and supervision of schools that received OB supplies.	Actual Position about Inspection and supervision of the OB schools.
	No. of schools to be inspected	Number of schools inspected
Monthly		
Quarterly		
Yearly		

b) Any specific norms of inspection / supervision for OB

- Norms exist (1)
- No Norms fixed (2)
- Left to the discretion of concerned official (3)
- Any other, Specify (4)

☐

c) Any general observation on OB performance
(Elicit information from the concerned Officials and write down here)

6. a) Are there any other externally assisted projects ?

Yes	(1)	☐
No	(2)	

b) If Yes in (a), state specific projects in operation in this Block/District. Comments of the Investigator (* See foot note and write brief comments below.)

List the Schemes (Other than OB)

i)
ii)
iii)
iv)

c) General comments on the implementation of OB scheme in the District / Block

i)	Excellent	(1)	☐
ii)	Good	(2)	
iii)	Satisfactory	(3)	
iv)	Unsatisfactory	(4)	

7. Elaborate the comments about implementation and state what is desirable to be done.

Name of Investigator
(in Block letters).

(Signature of the Investigator)

Agency to which attached.

Date:

---

* The Investigator should apprise himself / herself of various schemes / projects in the state for improvement of Elementary Education in the block / district. S/He should give comments / remarks about awareness of scheme in the concerned Block/District level officials.

Guidelines for Schedule -II

Note : This schedule relates to various aspects of the school as a unit with special reference to Operation Blackboard. The items covered are :

(i) General Information about the school like Date of Establishment, Type of Management, Location, Existence of Pre-Primary and High Schools in the Neighborhood, School Building, Playground, Toilet and Drinking Water Facilities, Blackboards, Student Enrolment and Money under contingency Fund etc.

(ii) Most of the data is to be filled by filling in the gaps and entering factual matter.

(iii) A number of items require entering code number in the rectangular blocks, and

(iv) A few are open-ended items in which the Investigator has to write freely, but briefly, his/her opinions or observations.

Item-wise Guidelines

Item 7 : This is important because it is related to checking (a) Enrolment and (b) related Attendance. One of the expected results is increase in enrolment and attendance. Therefore, facts and figures should be carefully collected and after verification about their accuracy should be entered, so that valid and reliable findings could be obtained.

Item 8 : This relates to the contingency fund which is an essential ingredient of implementation of the Operation Blackboard (OB) scheme. Its appropriate utilisation is a vital factor for OB. Under (vi) you need to get additional items suggested by the Headmaster. Under (vii) a few problems are coded. Against any other (specify), you should get opinions of Head of the School and add them serially.

Item 9

This is a new type of exercise. This is to be checked in only one class IV or V as the case may be (in the particular state). In the class, you should pick up **at random only five students and ask questions**, in a group, on four suitable items of OB equipment.

Record replies on a separate sheet and then enter them in the schedule.

Schedule - II

Operation Blackboard : A Survey

SCHOOL INFORMATION SCHEDULE

1. Identification Data about the School

		Code
State	-------------------	
District	-------------------	
Block / Mandal	-------------------	
Village	-------------------	
Name of School	-------------------	

Postal Address : --

Pin Code---------------------------

Phone (if any)--------------------

2. General information about the school.

(i) Year of Establishment ☐

(ii) Management : (with code numbers in brackets) ☐

Government	(1)
Local Bodies	(2)
Private Aided	(3)
Private Unaided	(4)

(iii) Is the School covered under OB Scheme ☐

Yes	(1)
No	(2)

(iv) Type of school ☐

Boys	(1)
Girls	(2)
Co-ed	(3)

3. Location of the school

(a) Distance from the Block headquarters. ☐

Less than one km.	(1)
1-2 kms.	(2)
2-3 kms.	(3)
More than 3 kms.	(4)

(b) Distance from the main road ☐

Located on main road	(1)
Less than one km.	(2)
1-2 kms.	(3)
2-3 kms.	(4)
More than 3 kms.	(5)

(c) Distance from the nearest Upper Primary School. ☐

Less than one km.	(1)
1-2 kms.	(2)
2-3 kms.	(3)
More than 3 kms.	(4)

(d) Distance from the nearest High School

Less than one km. (1)
1-3 kms. (2)
3-5 kms. (3)
More than 5 kms. (4) ☐

4. Communication

a) Public transport available Yes (1) No (2) ☐

b) Type of connecting road Kuccha (1) Pucca(2) ☐

5. School premises

(a) School building :

- (i) Owned (1)
- (ii) Rented Building (2)
- (iii) Rent-free Building (3)
- (iv) School has no building (functioning in tent/open space) (4) ☐

(b) Playground

- (i) Less than one acre - (1)
- (ii) One to three acres (2)
- (iii) More than three acres (3)
- (iv) There is no playground (4) ☐

(c) No. of classroom(s) ☐

(d) Blackboards

Sl. No.	Type	Number of Blackboards	Condition (Number)	
			Good	Not Good
(i)	Wall Plastered Blackboards			
(ii)	Tripod Blackboards			
(iii)	Roll-up Blackboard			
(iv)	Total			

(e) Drinking water facility in the school Yes (1) No (2) ☐

(f) (i) Toilet facilities in the school Yes (1) No (2) ☐

(ii) Toilet facilities separately for girls Yes (1) No (2) ☐

(g) (i) Whether material / equipment under the OB scheme has been received in the School? Yes (1) No (2) ☐

(ii) If yes, information about their availability in the school is to be marked in the following table

S.No	Items	Availability		Code
1	Maps	Yes (1)	No (2)	
2	Plastic Globe	Yes (1)	No (2)	
3	Educational chart	Yes (1)	No (2)	
4	Toys/ Wisdom Block	Yes (1)	No (2)	
5	Birds/Animals	Yes (1)	No (2)	
6	Games Equipment	Yes (1)	No (2)	
7	Science Kit	Yes (1)	No (2)	
8	Maths. Kit	Yes (1)	No (2)	
9	Tool Kit	Yes (1)	No (2)	
10	Musical Instrument	Yes (1)	No (2)	
11	Library Books	Yes (1)	No (2)	
12				
13				
14				
15				

6. Pre – Primary Schools

(i) Are there any pre-primary schools in the village? Yes (1) No (2) ☐

(ii) If yes, then mention the number of children on roll in :

(a) Anganwadi / Balwadi ☐

(b) Montessori School ☐

(c) Kindergarten School ☐

(d) Other Schools, Specify ☐
(For Children below 5 years of age)

(iii) Influence of Pre-primary Education facility available in the village on Enrolment in the Primary School.

(a) It helps increase in enrolment
Yes (1) No (2) ☐

(b) It makes learning easier in Primary classes

Yes (1) No (2) ☐

(c) Children join Primary classes with better social behaviour

Yes (1) No (2) ☐

7 Students on Roll and Average Attendance
(OB First phase : 1987-88 onwards)

Year	Item	Classes																	
		I			II			III			IV			V			Total		
		B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
Sept. 30 1993	On Roll																		
Sept. 30 1998	On Roll																		
	Attendance																		
Date of Visit (mention date)	On Roll																		
	Attendance																		

Abbreviations : B – Boys, G – Girls, T – Total

8. Contingency fund

i) Is there contingency fund — Yes (1) — No (2) ☐

If Yes to (i) above then ask the following

ii) How much contingency fund is provided (Fraction of Rupee should be upward rounded) — Amount in Rs. ☐

iii) Is the contingency fund adequate to meet all needs pertaining to replacement of OB material? — Yes (1) — No (2) ☐

iv) If the contingency funds not adequate, how much more will be required ? — Rs. 500 (1) — Rs. 1000 (2) ☐

v) Is the contingency fund released timely ? — Yes (1) — No (2) ☐

vi) How much contingency fund amount has been used?

Fully (1) — Partially (2) — Rarely (3) ☐

vii) Is the amount released every year in time?

Always (1) — Sometimes (2) — Rarely in time (3) ☐

viii) Items of expenditure out of contingency fund

New papers — Yes (1) — No (2) ☐

Magazines — Yes (1) — No (2) ☐

Repairs of materials — Yes (1) — No (2) ☐

Replacement of materials — Yes (1) — No (2) ☐

What other items, in your opinion, could be added

(a)

(b)

(c)

(ix)

Problems related to the Contingency Fund

(a) Releasing time	Yes (1)	No (2)	☐
(b) Unplanned spending	Yes (1)	No (2)	☐
(c) Should be raised in accordance with the rising prices of the articles	Yes (1)	No (2)	☐
(d) Need clear accounting procedure	Yes (1)	No (2)	☐

(e) Any other :
Please specify

(9) Students Awareness:-

This is to be done by interviewing personally five selected students at random from classes IV/ V. The Investigator may find a separate place and ask questions. Based on .responses, s/he should record his/her opinion.

i) Select only four of the equipments / aids as suited to the class.

If anyone answers, mark Yes
If no one answers, mark No

Taking into account **Yes** and **No** the investigator may record his/her opinion about use or non-use of equipments/aids. Ensure that all the 11 types of equipments/aids are covered.

S.No.	Items	Response Yes (1) No (2)	Opinion
1.	Maps	☐	
2.	Plastic Globe	☐	
3.	Educational Chart	☐	
4.	Toys/Wisdom Block	☐	

5. Birds/Animals ☐
6. Games Equipment ☐
7. Science Kit ☐
8. Maths. Kit ☐
9. Tool Kit ☐
10. Musical Instruments ☐
11. Library Books ☐
12. ☐
13. ☐
14. ☐
15. ☐

---

ii) Overall opinion of the Investigator about students awareness.

(10) Inspection and Supervision

(i) Your school is inspected :

(a) Regularly by:
Mandal/Taluk/Block level officer (1)
By District level Officer (2)
Both by Block and Dist. Officer (3) ☐

(b) In a routine manner (1)
Intensively (2) ☐

(c) Once a year (1)
Once in 2/3 years (2)
Once in 5 years (3)
As and when the officer likes (or say irregularly) (4) ☐

(ii) Inspector gives :
- (a) Broad suggestions only (1) ☐
- (b) Specific subject-wise guidelines/remarks (2)

(iii) Inspection Day :
- (a) is a day of tension (1) ☐
- (b) is a happy day for school improvement (2)

(iv) Suggestions made during inspection :
- (a) relate to OB (1) ☐
- (b) not related to OB (2)
- (c) of a general nature or of the nature of overall improvement (3)

Name of Investigator
(in BLOCK letters)

Signature of the Investigator

Date:-

Agency to which attached

Guidelines for Schedule - III

Note :

i) This is the most important part in OB. "As is the Teacher, so is the School" is an accepted observation commonly made by all.

ii) In this schedule, besides statistical information about number of teachers, their qualifications, training obtained etc., specific information about OB materials supplied, related training in the use of them, their impact on improvement of the teaching learning process, problems faced in the process and practical suggestions for improvement etc. are involved.

iii) Most of the items require numbers or codes to be identified and entered . They don't warrant any special guidelines as such. Some items however, need specific guidelines and these are stated below.

Item 4 :

There may be more teachers in some schools. However, you are to pick up only **four teachers (maximum)** from a school and get responses INDIVIDUALLY from each.

Other Items :

Wherever you come across a direction - "any other, specify", you should ask the respondent, and whatever is stated by the respondent, you should enter under 'specify'. In some cases, it may be too general in which case you grasp the point made and briefly state it in your own words.

Item 9

This is a new type of exercise. This is to be checked in only one class IV or V as the case may be (in the particular state). In the class, you should pick up **at random only five students and ask questions**, in a group, on four suitable items of OB equipment.

Record replies on a separate sheet and then enter them in the schedule.

Schedule -III

National Evaluation of Operation Blackboard (OB)

TEACHER SCHEDULE

Identification data

Code

State --------------

District --------------

Block/Mandal --------------

Village --------------

School --------------

Postal Address --

Pin code---------------------------------

Phone (if any)-----------------------------

(1) Is the respondent Head Teacher? Yes (1)No(2) ☐

(2) Number of Teachers in the school

(i) Sanctioned (including Headmaster / Headmistress) ☐

(ii) Actually working ☐

(iii) Vacant ☐

(3) Teacher's Qualifications (***Enter code of only highest academic qualification and Training acquired.**)

TeacherCode.	Name of the Teachers (including the Headmaster / Headmistress)	General Academic	Training Certificate	OB training Yes(1) No(2)	Multi grade training Yes(1) No(2)	Other In-service training Yes(1) No(2)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10						
11						

*** Code Numbers for :**

General :	Passed below class X	(1)
	Passed Matric/SSC/SSLC	(2)
	Passed XII class Public Exam	(3)
	Graduate degree holder	(4)
	Post graduate degree holder	(5)

Training Certificate :		
	Nursery Teacher Training	(1)
	Primary Teacher Training	(2)
	B.Ed. Training	(3)
	M.Ed. and above	(4)

(4). Orientation Training in OB for Teachers.

S. No	Particulars	**Code**
1.	Full Name of the Teacher With teacher code from item -3	
2.	Sex M (1) F (2)	
3.	Duration of Training Up-to 3 days ------- (1) 4 - 7 days ------- (2) More than 7 days ---- (3)	
4.	When trained? Year of OB starting (1) Later year (2)	
5.	OB items shown during training All--------- (1) Some----- (2) None----- (3)	
6.	OB items used and demonstrated during training All------ (1) Some--- (2) None---- (3)	
7.	Was OB Training adequate? Yes (1) No (2)	
8.	Did you share the knowledge with Non-OB Trained Teachers? Yes (1) No (2)	
9.	Do you actually demonstrate their use ? Yes (1) No (2)	
10.	Do you feel your teaching is better after OB Training? Yes (1) No (2)	
11	Do you find students more attentive after your OB Training? Yes (1) No (2)	
12	Do you feel that achievement of students improved after your OB Training? Yes (1) No (2)	

13	If yes in item 12, in which subject it is best? Mathematics (1) Social Science (2) Environment (3) Gen. Science (4)	☐
14	See the list of OB Aids and say (give the number from list of OB in Q.No. 6- a) (a) Which aid is most useful? (b) Which aid is least useful?	☐
15	After your OB training (i) Has the students' attendance increased? Yes (1) No (2) (ii) Has students' seriousness in learning increased ? Yes (1) No (2) (iii) Has teacher-pupil relationship improved? Yes (1) No (2)	☐ ☐ ☐

5. Awareness of OB Scheme

a) Concept of OB

S.No.	Item	Code			Code No.
		(1)	(2)	(3)	
i)	Expand the abbreviation OB	Fully correct	Partly correct	Could not expand	
ii)	How did you come to know of OB?	From a colleague	From a circular	From other sources	
iii)	Name the components of OB	Could name all	Could name some	Could not name any	
iv)	Why is it named OB?	Fully correct	Partly correct	Not at all correct	

b) Teaching Aids/Equipment under OB

(i) Are you trained in the use of OB Materials? Yes (1) No (2) ☐

(ii) Were the equipment and aids supplied in time Yes (1) No (2) ☐

(iii) Were all of them supplied All (1) Some (2) None (3) ☐

(iv)	Name the equipments supplied to the school	Fully correct (1) Partially correct (2) Not correct at all (3)	☐
(v)	Are they in good condition?	All (1) Some (2) None (3)	☐
(vi)	Have you used them?	Yes (1) No (2)	☐
(vii)	Do they make your teaching more effective?	Yes (1) No (2)	☐
(viii)	Do they benefit children in learning?	Fully (1) Partially (2) Nil (3)	☐

6. Actual use of Aids and Equipment

(a) Item-wise use in class (Enter Code **)
**Rarely (1), Frequently (2), Always (3)

S.No	Items	Classes in which used				
		I	II	III	IV	V
1.	Maps					
2.	Plastic Globe					
3.	Educational chart					
4.	Toys/Wisdom Block					
5.	Birds/Animals					
6.	Games Equipment					
7.	Science kit					
8.	Maths Kit					
9.	Tool Kit					
10.	Musical Instruments					
11.	Library Books					
12						
13						
14						
15						

(b) Reasons for non-use of OB aids and Equipments.
(Put appropriate code in the Blocks below)

i) Not aware of them Any (1) Some (2) ☐

ii) Do not know how to use them All (1) Some (2) ☐

iii) Aid is broken and cannot be used All (1) Some (2) ☐

iv) I am afraid that I may break it All (1) Some (2) ☐

v) It takes time to arrange and not worth the trouble All (1) Some (2) ☐

vi) I can teach the topics as well without it All (1) Some (2) ☐

vii) If any other, specify-

7. Problems faced in Effective use of OB Aids/Equipments
(Write appropriate codes in the Blocks below)

i)	No timely supply	Yes (1)	No (2)	☐
ii)	Aids not used during Training	Yes (1)	No (2)	☐
iii)	On the spot guidance is not available	Yes (1)	No (2)	☐
iv)	No serious meetings of Teachers for the proper use of OB	Yes (1)	No (2)	☐
v)	Students do not like the equipments/teaching aids	Yes (1)	No (2)	☐
vi)	Use of OB aids comes in the way of textual portion completion in time	Yes (1)	No (2)	☐

vii) Any Other, Specify:-

(8) Suggestions for improving OB Training

i)	Increase in Days of Training	Yes (1)		No (2)	☐
ii)	More time for practice in the use of OB aids during training	Yes (1)		No (2)	☐
iii)	If yes, what proportion of timed duration or practice of OB aids	10% (1)	20% (2)	30% (3)	☐
iv)	More Demonstration of equipment/aids by the trainer	In Trg. Centre (1)	In class-room schools (2)	In below (3)	☐
v)	Should test be held at the end of Training?	Yes (1)		No (2)	☐

vi) Any other, Specify :-

(9) Students Awareness:-

This is to be done by interviewing personally five selected students at random from classes IV/ V. The Investigator may find a separate place and ask questions. Based on .responses, s/he should record his/her opinion.

i) Select only four of the equipments / aids as suited to the class.

If anyone answers, mark Yes
If no one answers, mark No

Taking into account **Yes** and **No** the investigator may record his/her opinion about use or non-use of equipments/aids. Ensure that all the 11 types of equipments/aids are covered.

S.No.	Items	Response Yes (1) No (2)	Opinion
1.	Maps	☐	
2.	Plastic Globe	☐	
3.	Educational Chart	☐	

4. Toys/Wisdom Block ☐

5. Birds/Animals ☐

6. Games Equipment ☐

7. Science Kit ☐

8. Maths. Kit ☐

9. Tool Kit ☐

10. Musical Instruments ☐

11. Library Books ☐

12. ☐

13. ☐

14. ☐

15. ☐

Overall opinion of the Investigator

(10) Inspection and Supervision

(i) Your school is inspected :

(a) Regularly by:
Mandal/Taluk/Block level officer (1)
By District level Officer (2) ☐

(b) In a routine manner (1)
Intensively (2) ☐

(c) Once a year (1)
Once in 2/3 years (2)
Once in 5 years (3)
As and when the officer likes (4)
(or say irregularly) ☐

(ii) Inspector gives :
(a) Broad suggestions only (1) ☐
(b) Specific subject-wise guidelines/remarks (2)

(iii) Inspection Day :
(a) is a day of tension (1) ☐
(b) is a happy day for school improvement (2)

(iv) Suggestions made during inspection :
(a) relate to OB (1) ☐
(b) not related to OB (2)
(c) of a general nature or of the nature of overall improvement (3)

(11)Which are the major factors affecting retention rate in your school (give rank order from 1 to 7 for the following items according to their importance)

S.No	Items	Rank
i)	Mid-Day Scheme	
ii)	Free Uniform, Text books etc.	
iii)	Better Building	
iv)	Teacher	
v)	Teaching Aids	
vi)	Community drive	
vii)	Any other specify: -	

(12)Suggestions from the teacher to improve the standard of teaching in schools.

(1) Supply of OB materials in time Yes (1) No (2) ☐

(ii) Cover all teachers in orientation programmes meant for OB Yes (1) No (2) ☐

(iii) Headmaster should keep track of the use of OB materials by insisting on records of their use Yes (1) No (2) ☐

(iv)	Make provision of funds for replacement of the broken teaching aids	Yes (1) No (2)	☐
(iv)	Any other (Specify)		

Signature of the Investigator

Date

Name in Block Letters

Agency to which attached.

Guidelines for Schedule – IV

Note :

(1) This is a short schedule relating to opinions of the Community Leaders.

Interview THREE persons :

i) One of the office bearers in the Panchayat.

ii) One member of Village Education Committee (VEC) / Parent Teacher Association (PTA) / School Betterment Committee (SBC)

iii) Any parent whose child is studying in the class IV/ V in the school interested in the school. One of these preferably should be a lady.

(2) Record their personal data first

Name:- Office held :-

Age :- Profession followed:-

(3) Almost all items are codified. So, no special guidelines are necessary

Item 7

Calls for overall remarks:
Get remarks orally and enter them in your own language briefly.

Schedule -IV

National Evaluation of Operation Blackboard (OB)

COMMUNITY PARTICIPATION SCHEDULE

Identification data

Code

State ---------------

District ---------------

Block/ Mandal ---------------

School Code ---------------

Postal Address --

Pin Code -------------------------

Phone (if any)--------------------

1. Is the respondent related to PTA (1), SBC (2), VEC (3), Panchayat (4) Parent of child in class IV / V (5) ☐

2. Is there a :

   (i) Parent Teacher Association (PTA) Yes (1) No (2) ☐

   (ii) School Betterment Committee (SBC) Yes (1) No (2) ☐

   (iii) Village Education Committee (VEC) Yes (1) No (2) ☐

3. If yes, year of formation :

   More than ten year back (1)
   Between five years and ten years (2)
   Recently / less than five years (3)
   ☐

4. Frequency of Meetings :

   Once a Year (1)
   Twice a Year (2)
   More than twice based on needs (3)
   ☐

5. Participation

Sl. No.	Particular Aspects / Occasion	Code
a	Active Participants (i) Up to 20% (1) (ii) 20% to 50% (2) (iii) More than 50% (3)	
b	At school functions only Yes (1) No (2)	
c	Help in enrolment of students Yes (1) No (2)	
d	Procuring land for the school Yes (1) No (2)	

e.	Contributions towards :		
	i) School Building	Yes (1) No (2)	
	ii) Books for school library	Yes (1) No (2)	
	iii) Textbooks for students	Yes (1) No (2)	
	iv) Supply of furniture for Students	Yes (1) No (2)	
	v) Award of prizes to the students.	Yes (1) No (2)	
	vi) Any other (specify), like:		
	a) Getting recognition of the school from the Govt.	Yes (1) No (2)	
	b) Getting grants from the Govt.	Yes (1) No (2)	
	c) Giving guest lectures	Yes (1) No (2)	
	d) Providing games equipment.	Yes (1) No (2)	
	e) Arranging for medical aid	Yes (1) No (2)	
	f) -------------------------		
	g) -------------------------		

6. Community Awareness about OB
(The information may be collected through interviews)

i) Are you aware of OB Yes (1) No (2) ☐

ii) Source of awareness about OB

a) Through Teachers (1) ☐
b) Through other members (2)

7. Overall remarks by the Respondent.

Name of Investigator
(in BLOCK letter)

Signature of Investigator

Date :-

Agency to which attached.

Guidelines for Schedule -V

Note : After completing the four schedules and collecting the full data required, the Investigator should consolidate his/her opinions. S/He should then sit down alone in a room to fill up this Schedule but in the school premises itself so that s/he can get clarification, if any, needed to fill in the Schedule. Any important perception of the Investigator regarding the school, not covered in the earlier Schedules should be stated in this schedule at the end. This Schedule is expected to reflect the overall picture of (a) the School and Teacher, and (b) Community Leader's opinion together to form a coherent broad picture of the situation.

S/He should write down an exhaustive compact report on the overall picture in the school.

Schedule - V

National Evaluation of Operation Blackboard (OB)

INVESTIGATORS' OPINION SCHEDULE

1. Identification Data of the School

Code

State ------------------ ☐

District ------------------ ☐

Block / Mandal ------------------ ☐

Village ------------------ ☐

School ------------------ ☐

Postal Address ----------------------------------

Pin Code------------------------

Phone (if any)-------------------

2. Requirements for the school under OB

(i)	Whether additional room(s) have been constructed as required under OB scheme?	Yes (1) No (2)	☐
(ii)	Whether additional teacher(s) have been recruited as per OB scheme?	Yes (1) No (2)	☐
(iii)	Whether toilet facilities have been provided as envisaged under the OB scheme?	Yes (1) No (2)	☐
(iv)	Whether separate toilet has been provided for boys and girls?	Yes (1) No (2)	☐
(v)	Whether separate toilet has been provided for girls.	Yes (1) No (2)	☐

3. General comments on the school by the Investigating Team

(a) Cleanliness of School / Environment ☐
Excellent (1) Satisfactory (2) Unsatisfactory (3)

(b) Cleanliness of children ☐
Very good (1) Satisfactory (2) Unsatisfactory (3)

(c) Adequacy of Building ☐
Fully adequate (1) Partially adequate (2)
Grossly inadequate (3)

(d) Adequacy of seating ☐
More than adequate (1)
Just adequate (2)
Grossly inadequate (3)

(e) Suitability of seating ☐
Quite suitable (1)
Just all right (2)
Unsuitable (3)

(f) Adequacy of Teaching Aid ☐
Fully adequate (1) Partially adequate (2)
Totally inadequate (3)

(g) OB materials supply : ☐
In time (1) Slightly delayed (2) Non supply (3)

(h) Use of materials ☐
Regularly (1) Irregularly (2) Rarely (3)

(i) Supervision ☐
Quite useful (1) Satisfactory (2) Unsatisfactory (3)

(j) OB Orientation training for teachers ☐
Very effective (1) Useful (2) Not useful (3)

(k) Any other (specify)

4. School Climate

1. Are the children active in class? (Active means that children were seen participating actively in classroom activities) Yes/No (1)/(2) ☐

2. Do they have freedom to do activities according to their interest? Yes/No (1)/(2) ☐

3. Do they have opportunity to express their ideas and feelings freely? Yes/No (1)/(2) ☐

4. Are they exposed to variety of activities? Yes/No (1)/(2) ☐

5. Are they engaged in Play-way activities in the classroom? (activities conducted in play situations) Yes/No (1)/(2) ☐

Classroom

6. Are the classrooms attractive for children? Yes/No (1)/(2) ☐

7. Are the classrooms airy? Yes/No (1)/(2) ☐

8. Are the classrooms clean? Yes/No (1)/(2) ☐

9. Are the walls of the classroom decorated with meaningful charts? Yes/No (1)/(2) ☐

10. Is children's work displayed in the classroom? Yes/No (1)/(2) ☐

11. Is the daily time-table displayed in the classroom? Yes/No (1)/(2) ☐

12. How is the play material arranged

It is kept in almirahs and is taken out when required by teachers. (1)

It is kept within easy reach of children (2) ☐

It is kept in safe custody and not used (3)

13. Seating arrangement of children.

a) in rows Yes/No (1)/(2) ☐

b) in semi-circle Yes/No (1)/(2) ☐

c) in small groups Yes/No (1)/(2) ☐

14. Is the seating arrangement flexible to suit different activities? Yes/No (1)/(2) ☐

15. Do children show confidence while:

a) using workbooks/textbooks Yes/No (1)/(2) ☐

b) manipulating play material Yes/No (1)/(2) ☐

c) performing activities Yes/No (1)/(2) ☐

16 Do children play games Yes/No (1)/(2) ☐

17. Is locally available material utilised in day-to-day activities? Yes/No (1)/(2) ☐

18. Is there an activity corner in the classroom (i.e. Science corner, art and craft corner etc.) Yes/No (1)/(2) ☐

19. Is there library corner in the classroom? Yes/No (1)/(2) ☐

If Yes, then do children use it? Yes/No (1)/(2) ☐

20. Is safe clean drinking water available for children Yes/No (1)/(2) ☐

a) If Yes, then is it stored properly? Yes/No (1)/(2) ☐

b) Is it handled properly? Yes/No (1)/(2) ☐

21. Is a toilet available? Yes/No (1)/(2) ☐

If yes,
a) Is it clean? Yes/No (1)/(2) ☐

b) Is water available? Yes/No (1)/(2) ☐

Outdoor

22. Is some open space available for play? (according to the no. of children in school) Yes/No (1)/(2) ☐

23. Are the surroundings clean/hygienic? Yes/No (1)/(2) ☐

24. What are the outdoor equipments or facilities for play?
Please specify :

a)

b)

c)

Pupil Teacher Interaction

25. Does the teacher show concern for children Yes/No (1)/(2) ☐

26. Is she/he friendly with children Yes/No (1)/(2) ☐

27. Is she/he enthusiastic in conducting activities with children Yes/No (1)/(2) ☐

28. Is she/he able to look after the needs of individual children of different age – groups Yes/No (1)/(2) ☐

29. Give over all assessment of school climate

(1)	(2)	(3)	(4)	(5)
V. Poor	Poor	Average	Good	V. Good

☐

30. Any other observation
(Kindly report anything striking that you see).

Name of Investigator
(in BLOCK Letters)

Signature of the Investigator

Date: -

Agency to which attached.

INSTITUTIONS INVOLVED IN THE STATE SURVEY STUDIES

Sl. No.	Organisation	State
1.	Operations Research Group	Bihar
2.	Operations Research Group	West Bengal
3.	Operations Research Group	Assam
4.	Development and Research Services	Orissa
5.	Regional Institute of Education, NCERT, Ajmer	Rajasthan
6.	Regional Institute of Education, NCERT, Bhopal	Madhya Pradesh
7.	Institute for Communication and Development	Punjab
8.	Institute for Communication and Development	Haryana
9.	Institute for Communication and Development	Himachal Pradesh
10.	Society for Applied Research in Education and Development,_Delhi	Delhi
11.	Society for Applied Research in Education and Development,_Delhi	Uttar Pradesh
12.	Regional Institute of Education, Mysore	Tamil Nadu
13.	Regional Institute of Education, Bhubaneswar	Tripura
14.	Regional Institute of Education, Bhubaneswar	Mizoram
15.	Regional Institute of Education, Bhubaneswar	Sikkirn
16.	Regional Institute of Education, Bhubaneswar	A & N Islands
17.	Prayas, ltanagar	Arunachal Pradesh
18.	National Institute of Rural Developmcnt, Hyderabad	Nagaland
19.	National Institute of Rural Developmcnt, Hyderabad	Meghalaya
20.	National Institute of Rural Developmcnt, Hyderabad	Manipur
21.	Indian Institute of Education, Pune	Maharashtra
22.	Indian Institute of Education, Pune	Gujarat
23.	Northern Command HQ, Udhampur	Jammu and Kashmir
24.	Regional Institute of Education, Mysore	Pondicherry
25.	Regional Institute of Education, Mysore	Kerala
26.	Prof. Lalithamma, Mysore University	Karnataka
27.	Raghuvir Vernakar	Goa
28.	Dr. Shiva Reddy, Osmania University	Andhra Pradesh